FEM 1.209:130411

APR 15 1993

FLOOD INSURANCE STUDY

WALTON COUNTY, GEORGIA AND INCORPORATED AREAS

COMMUNITY NAME	COMMUNITY NUMBER
GOOD HOPE, TOWN OF	130411
MONROE, CITY OF	130227
UNINCORPORATED AREAS	130185

FEBRUARY 16, 1990

Federal Emergency Management Agency

TABLE OF CONTENTS

		Page
1.0	INTRODUCTION	1
1.1	Purpose of Study	1
1.2	Authority and Acknowledgments	1
1.3	Coordination	1
2.0	AREA STUDIED	2
2.1	Scope of Study	2
2.2	Community Description	2
2.3	Principal Flood Problems	4
2.4	Flood Protection Measures	4
3.0	ENGINEERING METHODS	4
3.1	Hydrologic Analyses	4
3.2	Hydraulic Analyses	8
4.0	FLOODPLAIN MANAGEMENT APPLICATIONS	9
4.1	Floodplain Boundaries	9
4.2	Floodways	9
5.0	INSURANCE APPLICATION	13
6.0	FLOOD INSURANCE RATE MAP	13
7.0	OTHER STUDIES	15
8.0	LOCATION OF DATA	15
9.0	REFERENCES AND BIBLIOGRAPHY	15

TABLE OF CONTENTS (continued)

Page

FIGURES

Figure 1 - Vicinity Map 3

Figure 2 - Floodway Schematic 10

TABLES

Table 1 - Summary of Discharges 5

Table 2 - Floodway Data 11

Table 3 - Community Map History 14

EXHIBITS

Flood Profiles

Alcovy River	Panels 01P-03P
Shoal Creek	Panels 04P-08P
Mountain Creek	Panels 09P-14P
Mountain Creek Tributary No. 1	Panels 15P-17P
Mountain Creek Tributary No. 2	Panels 18P-19P
Grubby Creek	Panel 20P
Jacks Creek Tributary No. 1	Panel 21P
Jacks Creek Tributary No. 2	Panel 22P
Jacks Creek Tributary No. 3	Panel 23P
Little Haynes Creek	Panels 24P-26P
Big Flat Creek	Panels 27P-28P

Flood Insurance Rate Map Index
Flood Insurance Rate Map

Elevation Reference Marks

FLOOD INSURANCE STUDY

WALTON COUNTY, GEORGIA,
AND INCORPORATED AREAS

1.0 INTRODUCTION

1.1 Purpose of Study

This Flood Insurance Study investigates the existence and severity of flood hazards in the geographic area of Walton County, Georgia, including the City of Monroe, the Town of Good Hope, and the Unincorporated Areas of Walton County (hereinafter referred to collectively as Walton County), and aids in the administration of the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973. This study has developed flood risk data for various areas of the community that will be used to establish actuarial flood insurance rates and assist the community in its efforts to promote sound floodplain management. Minimum floodplain management requirements for participation in the National Flood Insurance Program are set forth in the Code of Federal Regulations at 44 CFR, 60.3.

This Flood Insurance Study revises and supersedes a previous Flood Insurance Rate Map for the Town of Good Hope (Reference 1). This information will be used by the community to update existing floodplain regulations as part of the regular phase of the National Flood Insurance Program. The information will also be used by local and regional planners to further promote sound land use and floodplain development.

In some states or communities, floodplain management criteria or regulations may exist that are more restrictive or comprehensive than the minimum Federal requirements. In such cases, the more restrictive criteria take precedence and the state (or other jurisdictional agency) will be able to explain them.

1.2 Authority and Acknowledgments

The sources of authority for this Flood Insurance Study are the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973.

The hydrologic and hydraulic analyses for this study were performed by W.L. Jorden & Company, Inc. (the Study Contractor) for the Federal Emergency Management Agency (FEMA), under Contract No. EMA-86-C-0015. This study was completed in June 1987.

Additional hydrologic and hydraulic analyses for this study were taken from a U.S. Army Corps of Engineers (COE) Floodplain Information Report (Reference 2).

1.3 Coordination

A meeting was held January 21, 1986, at the Walton County Courthouse in Monroe, Georgia. The meeting was attended by representatives of FEMA, the Northeast Georgia Area Planning and Development Commission, the

the Northeast Georgia Area Planning and Development Commission, the Study Contractor, Walton County, and the City of Monroe. Streams requiring detailed study were identified based on historical flooding information and the growth potential of areas in the vicinity of the streams. Information concerning existing flood reports was also obtained.

On April 11, 1989, the results of this Flood Insurance Study were reviewed and accepted at a final coordination meeting attended by representatives of the Study Contractor, FEMA, and the community.

2.0 AREA STUDIED

2.1 Scope of Study

This Flood Insurance Study covers the geographic area of Walton County, Georgia. The area of study is shown on the Vicinity Map (Figure 1).

Flooding caused by overflow of the Alcovy River, Shoal Creek, Little Haynes Creek, Big Flat Creek, Jacks Creek Tributary No. 1, Mountain Creek, and Mountain Creek Tributary No. 1 was studied in detail.

Analyses of flooding caused by overflow of Jacks Creek Tributary Nos. 2 and 3, Grubby Creek, and Mountain Creek Tributary No. 2 were taken from the COE Floodplain Information Report (Reference 2).

Areas having low development potential or minimal flood hazards were previously studied using approximate analyses. The results were shown on the Flood Insurance Rate Map for the Town of Good Hope (Reference 1), and on the Flood Hazard Boundary Maps for Walton County and the City of Monroe (References 3 and 4) and are incorporated into this Flood Insurance Study.

The areas studied were selected with priority given to all known flood hazard areas and areas of projected development or proposed construction through June 1992. The scope and methods of study were proposed to and agreed upon by FEMA and Walton County.

2.2 Community Description

Walton County is in north-central Georgia on the Piedmont Plateau. It is approximately forty-one miles east of Atlanta and approximately twenty-five miles southwest of Athens. The City of Monroe is the county seat. Walton County is bordered by Barrow and Oconee Counties on the north, Morgan County on the southeast, Rockdale and Newton Counties on the southwest, and Gwinnett County on the northwest. The county is served by Interstate 20, U.S. Route 78, State Routes 138, 81, 11, 83, 186, and 10, and the CSX railroad. The 1980 population of Walton County was reported to be 31,211 (Reference 5).

Walton County is primarily agricultural, with cotton, corn, and grain being the principal crops. Dairy cattle, beef cattle, and poultry are also important to the local economy (Reference 2).

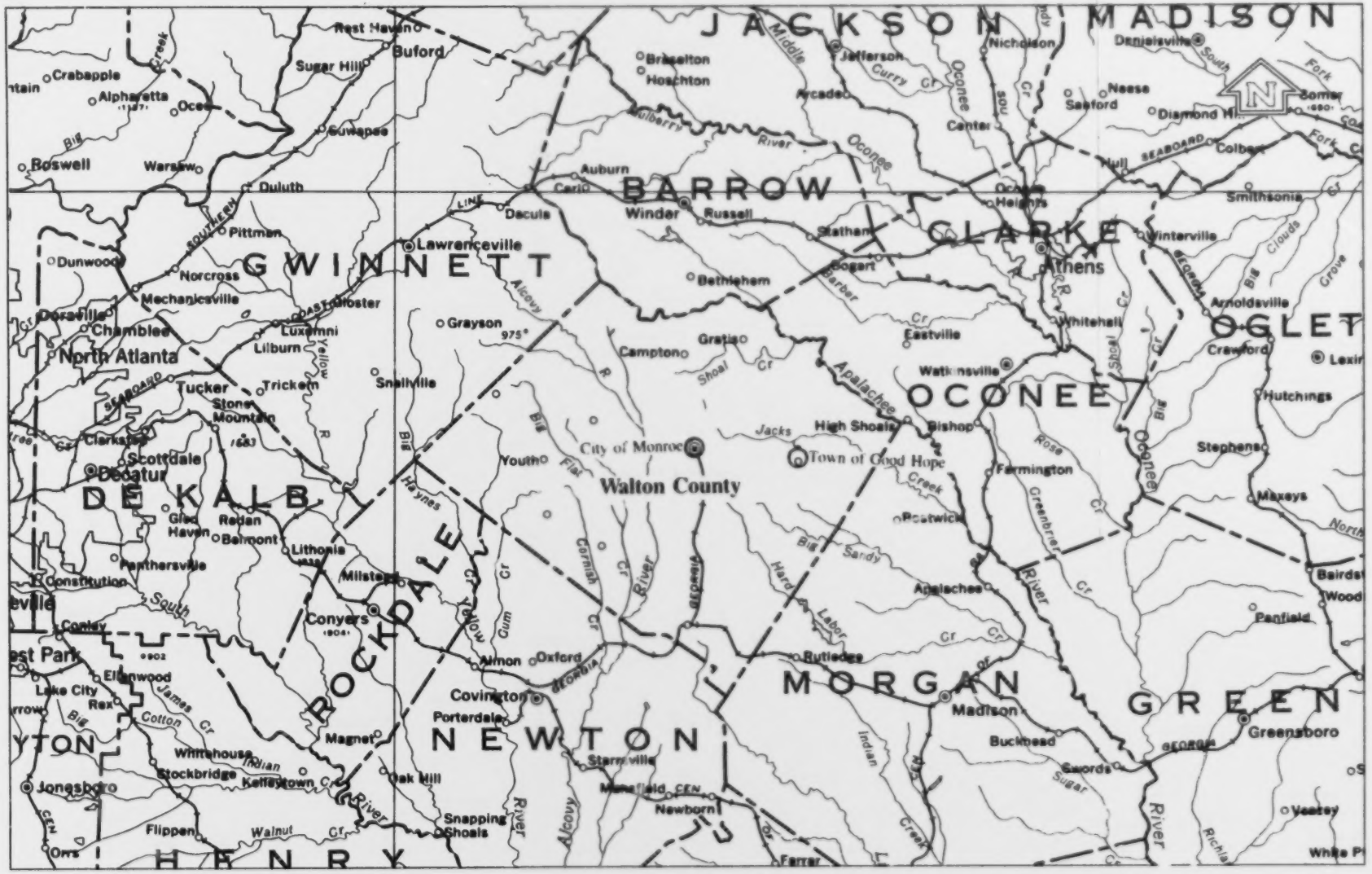


FIGURE 1

FEDERAL EMERGENCY MANAGEMENT AGENCY

WALTON COUNTY, GA
AND INCORPORATED AREAS

APPROXIMATE SCALE

8 0 8 16 24 MILES

VICINITY MAP

The climate of Walton County is generally mild, with summertime highs exceeding 90 degrees Fahrenheit (°F) and winter lows below 32°F. The average annual precipitation of about 50-52 inches is fairly evenly distributed throughout the year, with the exception of March, which has over 5 inches of precipitation (Reference 6).

2.3 Principal Flood Problems

Damaging floods in the region often occur during winter and spring, when flooding is most likely. The most severe flooding in the area occurred in January 1946, but large floods also occurred in November 1948 and March 1971 (Reference 2). Major flooding in the area is caused primarily by runoff from rain and thunderstorms, but occasionally large floods are caused by hurricane and tropical storm activity.

2.4 Flood Protection Measures

There are several detention ponds and two dams, the Monroe Dam and the Deer Acres Lake Dam, located on Jacks Creek Tributary No. 1, but they do not protect against a significant flood event such as the 100-year flood. No other flood protection measures are known to exist within the study area.

3.0 ENGINEERING METHODS

For the flooding sources studied in detail in the community, standard hydrologic and hydraulic study methods were used to determine the flood hazard data required for this study. Flood events of a magnitude that is expected to be equaled or exceeded once on the average during any 10-, 50-, 100-, or 500-year period (recurrence interval) have been selected as having special significance for floodplain management and for flood insurance rates. These events, commonly termed the 10-, 50-, 100-, and 500-year floods, have a 10-, 2-, 1-, and 0.2-percent chance, respectively, of being equaled or exceeded during any year. Although the recurrence interval represents the long-term average period between floods of a specific magnitude, rare floods could occur at short intervals or even within the same year. The risk of experiencing a rare flood increases when periods greater than 1 year are considered. For example, the risk of having a flood that equals or exceeds the 100-year flood (1-percent chance of annual exceedence) in any 50-year period is approximately 40 percent (4 in 10), and, for any 90-year period, the risk increases to approximately 60 percent (6 in 10). The analyses reported herein reflect flooding potentials based on conditions existing in the community at the time of completion of this study. Maps and flood elevations will be amended periodically to reflect future changes.

3.1 Hydrologic Analyses

Hydrologic analyses were carried out to establish the peak discharge-frequency relationships for each riverine flooding source studied in detail affecting the community.

The discharge frequency relationships were developed using regional frequency equations and methodologies developed for non-urbanized basins (Reference 7). Peak flows for urbanized areas were developed using the modified Sauer equations (Reference 7). Only those areas with existing development reflect urbanized flows. Future development possibilities were not taken into consideration when computing stream flows.

Peak discharge-drainage area relationships for the 10-, 50-, 100-, and 500-year floods of each flooding source studied in detail in the community are shown in Table 1.

TABLE 1 - SUMMARY OF DISCHARGES

FLOODING SOURCE AND LOCATION	DRAINAGE AREA (SQ MILES)	PEAK DISCHARGE (CFS) 10-YEAR	50-YEAR	100-YEAR	500-YEAR
MOUNTAIN CREEK					
about 0.887 mile upstream of Liberty Hill Church Road	5.64	1,526	2,331	2,682	3,597
just downstream of McDaniel Street	5.44	1,508	2,300	2,645	3,544
at confluence of Mountain Creek Tributary	4.52	1,352	2,065	2,379	3,192
about 1,000 feet upstream of Spring Street	3.16	1,039	1,609	1,865	2,528
about 700 feet upstream of U.S. Highway 78	2.57	921	1,429	1,659	2,253
MOUNTAIN CREEK TRIBUTARY No. 1					
at mouth	1.20	644	985	1,144	1,543
about 300 feet downstream of Spring Street	1.05	625	948	1,098	1,474
MOUNTAIN CREEK TRIBUTARY No. 2					
at Calvary Church Road	1.76	N/A	N/A	1,040	2,490
at Crisswell Road	1.52	N/A	N/A	950	3,370
at Walker Drive	0.69	N/A	N/A	580	1,380

TABLE 1 - SUMMARY OF DISCHARGES (continued)

FLOODING SOURCE AND LOCATION	DRAINAGE AREA (SQ MILES)	PEAK DISCHARGE (CFS) 10-YEAR	50-YEAR	100-YEAR	500-YEAR
JACKS CREEK TRIBUTARY No. 1					
at mouth	3.56	942	1,518	1,778	2,464
about 1,000 feet downstream of East Marable Street	3.14	876	1,412	1,655	2,296
about 55 feet upstream of East Marable Street	2.67	796	1,285	1,509	2,097
at Deeres Acres Lake	2.19	N/A	N/A	1,210	2,890
JACKS CREEK TRIBUTARY No. 2					
at Baker Street	0.37	N/A	N/A	400	950
at U.S. Highway 78	0.26	N/A	N/A	320	770
JACKS CREEK TRIBUTARY No. 3					
at mouth	1.45	N/A	N/A	920	2,200
at Hammond Drive	0.58	N/A	N/A	520	1,250
at East Spring Street	0.29	N/A	N/A	350	830
ALCOVY RIVER					
about 1.5 mile downstream of New Hope Road	83.72	6,079	9,479	10,753	14,440
about 1.5 mile downstream of Bullock Road	81.14	5,967	9,309	10,563	14,189
about 1.74 mile downstream of State Highway 81	60.61	5,024	7,860	8,945	12,051
about 0.64 mile upstream of State Highway 81	57.18	4,854	7,599	8,652	11,664
BIG FLAT CREEK					
about 0.83 mile downstream of Hodges Road	6.95	1,658	2,550	2,936	3,950
just downstream of U.S. Highway 78	5.18	1,429	2,192	2,526	3,396
just downstream of Old Zion Cemetery Road	3.70	1,200	1,836	2,119	2,848

TABLE 1 - SUMMARY OF DISCHARGES (continued)

FLOODING SOURCE AND LOCATION	DRAINAGE AREA (SQ MILES)	PEAK DISCHARGE (CFS) 10-YEAR	50-YEAR	100-YEAR	500-YEAR
LITTLE HAYNES CREEK					
about 1.1 miles downstream of Center Hill Church Road	15.50	2,247	3,564	4,111	5,615
about 1.2 miles upstream of Center Hill Church Road	9.93	1,728	2,753	3,190	4,376
about 3.0 miles upstream of Center Hill Church Road	5.18	1,177	1,887	2,201	3,040
SHOAL CREEK					
about 0.84 mile downstream of Bradley Gin Road	18.44	2,490	3,942	4,539	6,189
about 1.12 mile upstream of Bradley Gin Road	12.34	1,964	3,122	3,610	4,942
about 1,680 feet upstream of Carl Moon Road	10.00	1,735	2,764	3,203	4,393
about 0.68 mile upstream of Mount Vernon Road	7.02	1,408	2,251	2,618	3,604
just upstream of Dry Pond Road	4.53	1,088	1,746	2,039	2,820
about 2,175 feet upstream of John Stowe Road	2.29	727	1,176	1,382	1,924
GRUBBY CREEK					
at Poplar Street	1.25	N/A	N/A	840	2,010

3.2 Hydraulic Analyses

Analyses of the hydraulic characteristics of flooding from the sources studied were carried out to provide estimates of the elevations of floods of the selected recurrence intervals.

Cross-section data for all streams studied in detail were obtained by field survey. Additional cross sections were interpolated using field-surveyed cross sections and topographic maps. Structural geometry and elevations for bridges and road sections were obtained from field surveys.

Locations of selected cross sections used in the hydraulic analyses are shown on the Flood Profiles and on the Flood Insurance Rate Map.

Roughness coefficients (Manning's "n") used in the hydraulic computations were chosen by engineering judgement and based on field observation of the floodplain areas. The range of the "n" values used for the study are shown below.

ROUGHNESS COEFFICIENTS

	MANNING'S "n"	
STREAM	CHANNEL	OVERBANKS
Jacks Creek Tributary Nos. 1, 2, and 3	0.040 to 0.070	0.055 to 0.170
Mountain Creek	0.040 to 0.070	0.055 to 0.170
Mountain Creek Tributary Nos. 1 and 2	0.040 to 0.070	0.055 to 0.170
Alcovy River	0.035 to 0.050	0.055 to 0.170
Big Flat Creek	0.035 to 0.050	0.055 to 0.170
Little Haynes	0.035 to 0.050	0.055 to 0.170
Shoal Creek	0.035 to 0.050	0.055 to 0.170

Water-surface elevations for the 10-, 50-, 100-, and 500-year floods for Mountain Creek, Mountain Creek Tributary No. 1, Jacks Creek Tributary No. 1, the Alcovy River, Big Flat Creek, Little Haynes Creek, and Shoal Creek were computed using the HEC-2 step backwater computer program (Reference 8). The upstream water-surface elevations for Grubby Creek, Mountain Creek Tributary No. 1 upstream of East Spring Street, Mountain Creek Tributary No. 2, and Jacks Creek Tributary Nos. 1, 2, and 3 were taken from the Floodplain Information Report (Reference 2).

The starting water-surface elevations for Mountain Creek, Mountain Creek Tributary No. 1 upstream of East Spring Street, the Alcovy River, Big Flat Creek, Little Haynes Creek, and Shoal Creek were computed using the HEC-2 slope-area method (Reference 8).

Flood profiles were drawn showing the computed water-surface elevations for floods of the selected recurrence intervals. In cases where the 50- and 100-year flood elevations are close together, due to limitations of the profile scale, only the 100-year profile has been shown.

The hydraulic analyses for this study are based on the effec unobstructed flow. The flood elevations shown on the profiles are considered valid only if hydraulic structures remain unobstructed, op properly, and do not fail.

All elevations are referenced to the National Geodetic Vertical Datu 1929 (NGVD). Elevation reference marks used in this study are shov the map and described in the exhibit labeled Elevation Reference Mark

4.0 FLOODPLAIN MANAGEMENT APPLICATIONS

The National Flood Insurance Program encourages State and local governmer adopt sound floodplain management programs. Therefore, each Flood Insu Study provides 100-year flood elevations and delineations of the 100- and 500 floodplain boundaries and 100-year floodway to assist communities in devel floodplain management measures.

4.1 Floodplain Boundaries

To provide a national standard without regional discrimination, the 1-pe annual chance (100-year) flood has been adopted by FEMA as the base for floodplain management purposes. The 0.2-percent annual chance (500- flood is employed to indicate additional areas of flood risk in the comm For each stream studied in detail, the 100- and 500-year floodplain boun have been delineated using the flood elevations determined at each section. Between cross sections, the boundaries were interpolated topographic maps at a scale of 1:24000 with a contour interval of 20 (Reference 9).

The 100- and 500-year floodplain boundaries are shown on the Flood Insu Rate Map. On this map, the 100-year floodplain boundary corresponds t boundary of the areas of special flood hazards (Zones A, AE, AH, AO, V, and VE) and the 500-year floodplain boundary corresponds to the bou of areas of moderate flood hazards. In cases where the 100- and 500 floodplain boundaries are close together, only the 100-year floo boundary has been shown. Small areas within the floodplain boundarie lie above the flood elevations but cannot be shown due to limitations map scale and/or lack of detailed topographic data.

For the streams studied by approximate methods, only the 100-year floo boundary was delineated using Flood Hazard Boundary Maps for the W County and the City of Monroe (References 3 and 4) and the Insurance Rate Map for the Town of Good Hope (Reference 1).

4.2 Floodways

Encroachment on floodplains, such as structures and fill, reduces flood-carrying capacity, increases the flood heights and velocities increases flood hazards in areas beyond the encroachment itself. One a of floodplain management involves balancing the economic gain floodplain development against the resulting increase in flood hazard. purposes of the National Flood Insurance Program, a floodway is usec

tool to assist local communities in this aspect of floodplain management. Under this concept, the area of the 100-year floodplain is divided into a floodway and a floodway fringe. The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 100-year flood can be carried without substantial increases in flood heights. Minimum Federal standards limit such increases to 1.0 foot, provided that hazardous velocities are not produced. The floodways in this study are presented to local agencies as minimum standards that can be adopted directly or that can be used as a basis for additional floodway studies.

The floodways for this study were computed for certain stream segments on the basis of equal conveyance reduction from each side of the floodplain. Floodway widths were computed at cross sections. Between cross sections, the floodway boundaries were interpolated. The results of the floodway computations are tabulated for selected cross sections and are shown in Table 2, Floodway Data. The computed floodways are shown on the Flood Insurance Rate Map. In cases where the floodway and 100-year floodplain boundaries are either close together or collinear, only the floodway boundary is shown.

Along streams where floodways have not been computed, the community must ensure that the cumulative effect of development in the floodplain will not cause more than 1.0-foot increase in the base flood elevations at any point within the community.

The area between the floodway and the 100-year floodplain boundaries is termed the floodway fringe. The floodway fringe encompasses the portion of the floodplain that could be completely obstructed without increasing the water-surface elevation of the 100-year flood by more than 1.0 foot. Typical relationships between the floodway and the floodway fringe and their significance to floodplain development are shown in Figure 2.

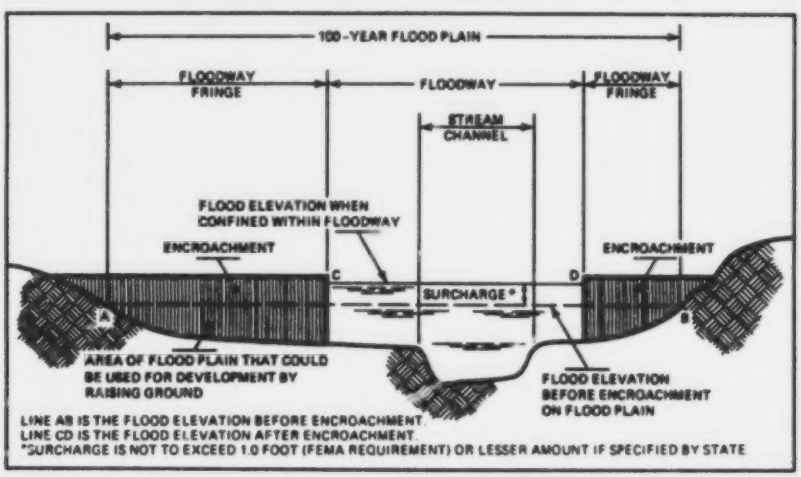

100-YEAR FLOOD PLAIN
FLOODWAY FRINGE
FLOODWAY
FLOODWAY FRINGE
STREAM CHANNEL
FLOOD ELEVATION WHEN CONFINED WITHIN FLOODWAY
ENCROACHMENT
ENCROACHMENT
C
D
SURCHARGE*
A
B
AREA OF FLOOD PLAIN THAT COULD BE USED FOR DEVELOPMENT BY RAISING GROUND
FLOOD ELEVATION BEFORE ENCROACHMENT ON FLOOD PLAIN
LINE AB IS THE FLOOD ELEVATION BEFORE ENCROACHMENT.
LINE CD IS THE FLOOD ELEVATION AFTER ENCROACHMENT.
*SURCHARGE IS NOT TO EXCEED 1.0 FOOT (FEMA REQUIREMENT) OR LESSER AMOUNT IF SPECIFIED BY STATE

FIGURE 2 - Floodway Schematic

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC.)	REGULATORY (FEET NGVD)	WITHOUT FLOODWAY (FEET NGVD)	WITH FLOODWAY (FEET NGVD)	INCREASE (FEET)
MOUNTAIN CREEK								
A	4600	191	1303	2.1	744.0	744.0	745.0	1.0
B	6300	252	1496	1.8	747.0	747.0	748.0	1.0
C	6835	242	1320	2.0	747.6	747.6	748.6	1.0
D	7590	36	404	6.5	753.2	753.2	753.9	0.7
E	8836	193	1096	2.2	755.4	755.4	756.0	0.6
F	10,339	200	889	2.7	761.8	761.8	761.8	0.0
G	10,941	303	1159	1.6	762.7	762.7	763.1	0.4
H	11,917	287	893	2.1	766.7	766.7	766.7	0.0
I	12,794	51	273	6.8	771.6	771.6	772.0	0.4
J	13,206	30	205	9.1	778.6	778.6	778.6	0.0
K	13,326	33	211	8.8	780.0	780.0	780.1	0.1
L	13,878	33	236	7.9	782.9	782.9	783.8	0.9
M	14,840	18	117	16.0	788.0	788.0	788.6	0.6
N	16,539	27	166	10.0	795.9	795.9	796.3	0.4
MOUNTAIN CREEK TRIBUTARY NO. 1								
A	843[2]	22	83	13.8	757.1	757.1	757.3	0.2
B	959[2]	22	249	4.6	764.2	764.2	764.2	0.0
C	3305[2]	74	175	6.3	775.5	775.5	775.5	0.0
D	3611[2]	8	56	10.3	778.3	778.3	778.6	0.3
E	3668[2]	64	317	1.8	781.6	781.6	782.4	0.8

[1]FEET ABOVE LIBERTY HILL CHURCH ROAD
[2]FEET ABOVE CONFLUENCE WITH MOUNTAIN CREEK

TABLE 2

FEDERAL EMERGENCY MANAGEMENT AGENCY

WALTON COUNTY, GA
AND INCORPORATED AREAS

FLOODWAY DATA

MOUNTAIN CREEK—MOUNTAIN CREEK TRIBUTARY NO. 1

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC.)	REGULATORY (FEET NGVD)	WITHOUT FLOODWAY (FEET NGVD)	WITH FLOODWAY (FEET NGVD)	INCREASE (FEET)
LITTLE HAYNES CREEK								
A	5425	200	1681	2.4	712.1	712.1	713.1	1.0
B	8192	420	2297	1.8	719.1	719.1	719.7	0.6
C	9503	350	1793	2.3	722.7	722.7	723.5	0.8
D	10,484	225	697	5.9	727.1	727.1	728.1	1.0
E	11,444	105	1039	4.0	743.3	743.3	744.0	0.7
F	14,681	310	1600	2.6	748.0	748.0	749.0	1.0
G	17,510	250	1346	2.4	754.2	754.2	754.8	0.6
H	20,706	340	1339	2.4	760.6	760.6	761.5	0.9
I	21,699	340	1360	2.3	763.1	763.1	763.7	0.6
J	24,440	55	424	7.5	770.9	770.9	771.9	1.0
K	25,635	83	484	6.6	777.3	777.3	777.7	0.4
L	27,386	340	1209	1.8	782.6	782.6	783.5	0.9
M	29,630	48	294	7.5	789.6	789.6	790.4	0.8
BIG FLAT CREEK								
A	2600[2]	533	3248	0.9	860.6	860.6	861.6	1.0
B	4080[2]	510	3412	0.9	861.3	861.3	862.2	0.9
C	6242[2]	475	2316	1.3	862.6	862.6	863.6	1.0
D	7036[2]	377	1343	2.2	867.1	867.1	867.5	0.4
E	8150[2]	303	1547	1.9	869.6	869.6	870.1	0.5
F	8968[2]	240	2492	1.0	876.2	876.2	876.8	0.6
G	10,770[2]	350	2701	0.9	876.2	876.2	876.9	0.7

[1]FEET ABOVE COUNTY BOUNDARY
[2]FEET ABOVE MARCE CA[illegible]F ROAD

TABLE 2

FEDERAL EMERGENCY MANAGEMENT AGENCY

WALTON COUNTY, GA
AND INCORPORATED AREAS

FLOODWAY DATA

LITTLE HAYNES CREEK—BIG FLAT CREEK

5.0 INSURANCE APPLICATION

For flood insurance rating purposes, flood insurance zone designations are assigned to a community based on the results of the engineering analyses. These zones are as follows:

Zone A

Zone A is the flood insurance rate zone that corresponds to the 100-year floodplains that are determined in the Flood Insurance Study by approximate methods. Because detailed hydraulic analyses are not performed for such areas, no base flood elevations or depths are shown within this zone.

Zone AE

Zone AE is the flood insurance rate zone that corresponds to the 100-year floodplains that are determined in the Flood Insurance Study by detailed methods. Whole-foot base flood elevations derived from the detailed hydraulic analyses are shown at selected intervals within this zone.

Zone X

Zone X is the flood insurance rate zone that corresponds to areas outside the 100-year floodplain, areas of 100-year flooding where average depths are less than 1 foot, areas of 100-year flooding where the contributing drainage area is less than 1 square mile, and areas protected from the 100-year flood by levees. No base flood elevations or depths are shown within this zone.

6.0 FLOOD INSURANCE RATE MAP

The Flood Insurance Rate Map is designed for flood insurance and floodplain management applications.

For flood insurance applications, the map designates flood insurance rate zones as described in Section 5.0 and, in the 100-year floodplains that were studied by detailed methods, shows selected whole-foot base flood elevations or average depths. Insurance agents use the zones and base flood elevations in conjunction with information on structures and their contents to assign premium rates for flood insurance policies.

For floodplain management applications, the map shows by tints, screens, and symbols the 100- and 500-year floodplains, the floodways, and the locations of selected cross sections used in the hydraulic analyses and floodway computations.

The current Flood Insurance Rate Map presents flooding information for the geographic area of Walton County. Previously, separate Flood Hazard Boundary Maps and/or Flood Insurance Rate Maps were prepared for each flood-prone incorporated community and the unincorporated areas of the county. Historical data relating to the maps prepared for each community are presented in Table 3, Community Map History.

COMMUNITY NAME	INITIAL IDENTIFICATION	FLOOD HAZARD BOUNDARY MAP REVISIONS DATE	FIRM EFFECTIVE DATE	FIRM REVISIONS DATE
GOOD HOPE, TOWN OF	APRIL 4, 1975		JUNE 17, 1986	
MONROE, CITY OF	JUNE 28, 1974	FEB 6, 1976	FEB 16, 1990	
UNINCORPORATED AREAS	FEB 20, 1976	JULY 30, 1976	FEB 16, 1990	

TABLE 3

FEDERAL EMERGENCY MANAGEMENT AGENCY

WALTON COUNTY, GA AND INCORPORATED AREAS

COMMUNITY MAP HISTORY

7.0 OTHER STUDIES

Flood Insurance Studies published for Rockdale and Newton Counties, Georgia (References 10 and 11) are in agreement with this study.

The Flood Insurance Rate Map printed for the City of Loganville, Georgia (Reference 12) is in agreement with this study.

The Flood Insurance Study in progress for Oconee County, Georgia (Reference 13) is in agreement with this study.

A revision to the published Flood Insurance Study for Gwinnett County, Georgia (Reference 14) is in progress and is in agreement with this study.

This Flood Insurance Study supersedes the previously printed Flood Hazard Boundary Maps for Walton County and the City of Monroe (References 3 and 4) and the previously published Flood Insurance Rate Map for the Town of Good Hope (Reference 1).

8.0 LOCATION OF DATA

Information concerning the pertinent data used in the preparation of this study can be obtained by contacting the Natural and Technological Hazards Division, FEMA, 1371 Peachtree Street, NE., Suite 736, Atlanta, Georgia 30309.

Future revisions may be made that do not result in the republishing of the Flood Insurance Study report. To assure that any user is aware of all revisions, it is advisable to contact the map repository of flood hazard data located in the community.

9.0 REFERENCES AND BIBLIOGRAPHY

1. Federal Emergency Management Agency, Flood Insurance Rate Map, Town of Good Hope, Walton County, Georgia, June 1986.

2. U.S. Army Corps of Engineers, Savannah District, Floodplain Information Report, Jacks Creek, Grubby Creek, Mountain Creek and Tributaries, City of Monroe, Georgia, June 1975.

3. U.S. Department of Housing and Urban Development, Federal Insurance Administration, Flood Hazard Boundary Map, Walton County, Unincorporated Areas, Georgia, July 1976.

4. ————, Federal Insurance Administration, Flood Hazard Boundary Map, City of Monroe, Walton County, Georgia, February 1976.

5. U.S. Department of Commerce, Bureau of the Census, 1980 Census of Population, Number of Inhabitants, Georgia, Washington, D.C., January 1982.

6. Northeast Georgia Area Planning and Development Commission, Economic Profile of Walton County, Georgia, Walton County, Georgia, October 1983.

7. U.S. Department of the Interior, Geological Survey, Water Resources Investigations Report No. 78-137, Floods in Georgia, Magnitude and Frequency, McGlone Price and Harold Golden, October 1979.

8. U.S. Army Corps of Engineers, Hydrologic Engineering Center, HEC-2 Water Surface Profiles, Computer Program 723-X6-L202A, Davis, California, April 1984.

9. U.S. Department of the Interior, Geological Survey, 7.5 Minute Series Topographic Maps, Scale 1:24000, Contour Interval 20 Feet: Monroe, Georgia, 1985; Statham, Georgia, 1964; Between, Georgia, 1964; Bold Springs, Georgia 1964; Winder South, Georgia, 1964; Loganville, Georgia 1964; and High Shoal, Georgia, 1964.

10. Federal Emergency Management Agency, Flood Insurance Study, Rockdale County, Unincorporated Areas, Georgia, revised September 1984.

11. ————, Flood Insurance Study, Newton County, Unincorporated Areas, Georgia, July 1983.

12. ————, Flood Insurance Rate Map, City of Loganville, Gwinnett County, Georgia, July 1982.

13. ————, Flood Insurance Study, Oconee County, Unincorporated Areas, Georgia, in progress.

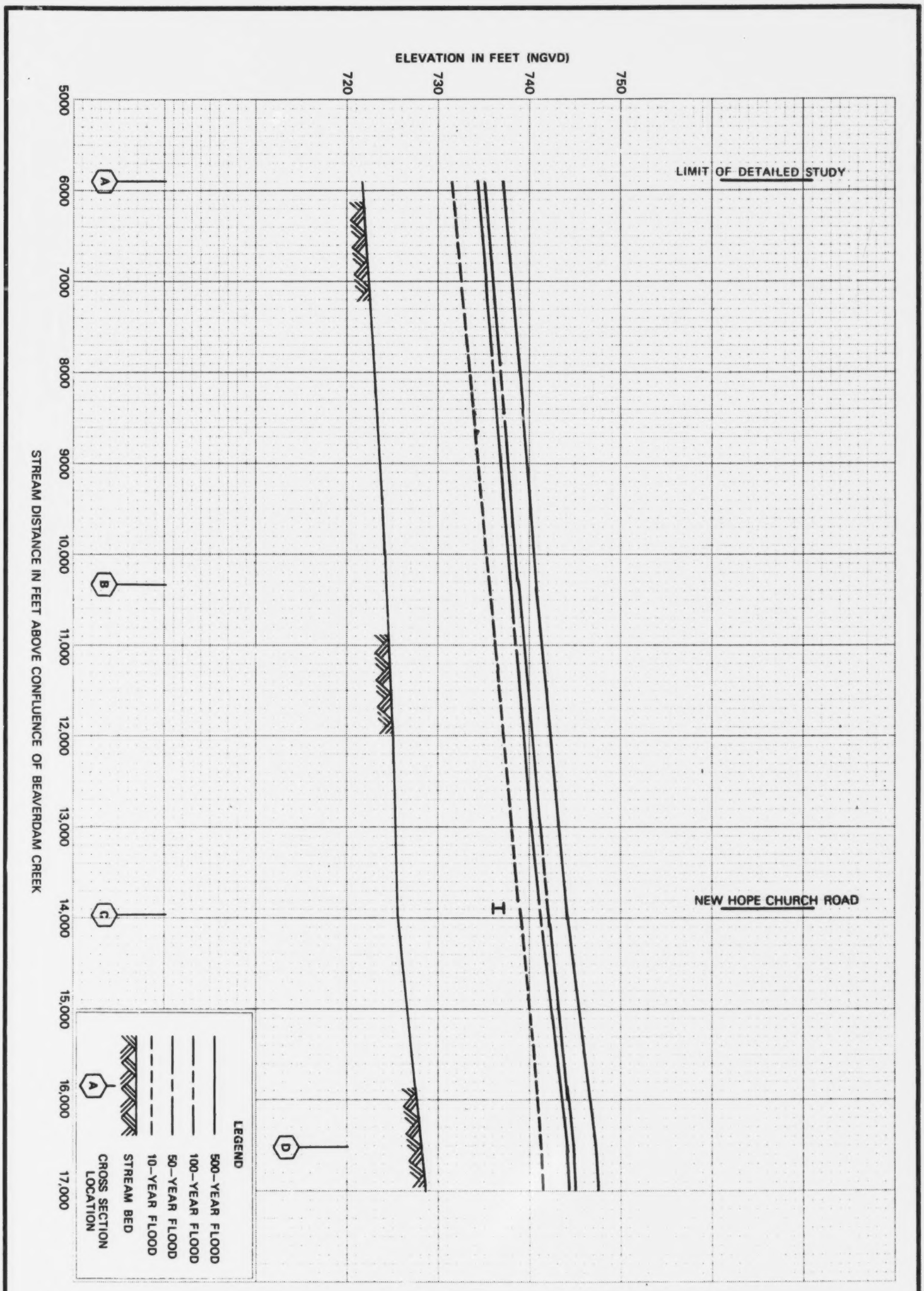
14. ————, Flood Insurance Study, Gwinnett County, Unincorporated Areas, Georgia, September 1985, revision in progress.

ELEVATION REFERENCE MARKS

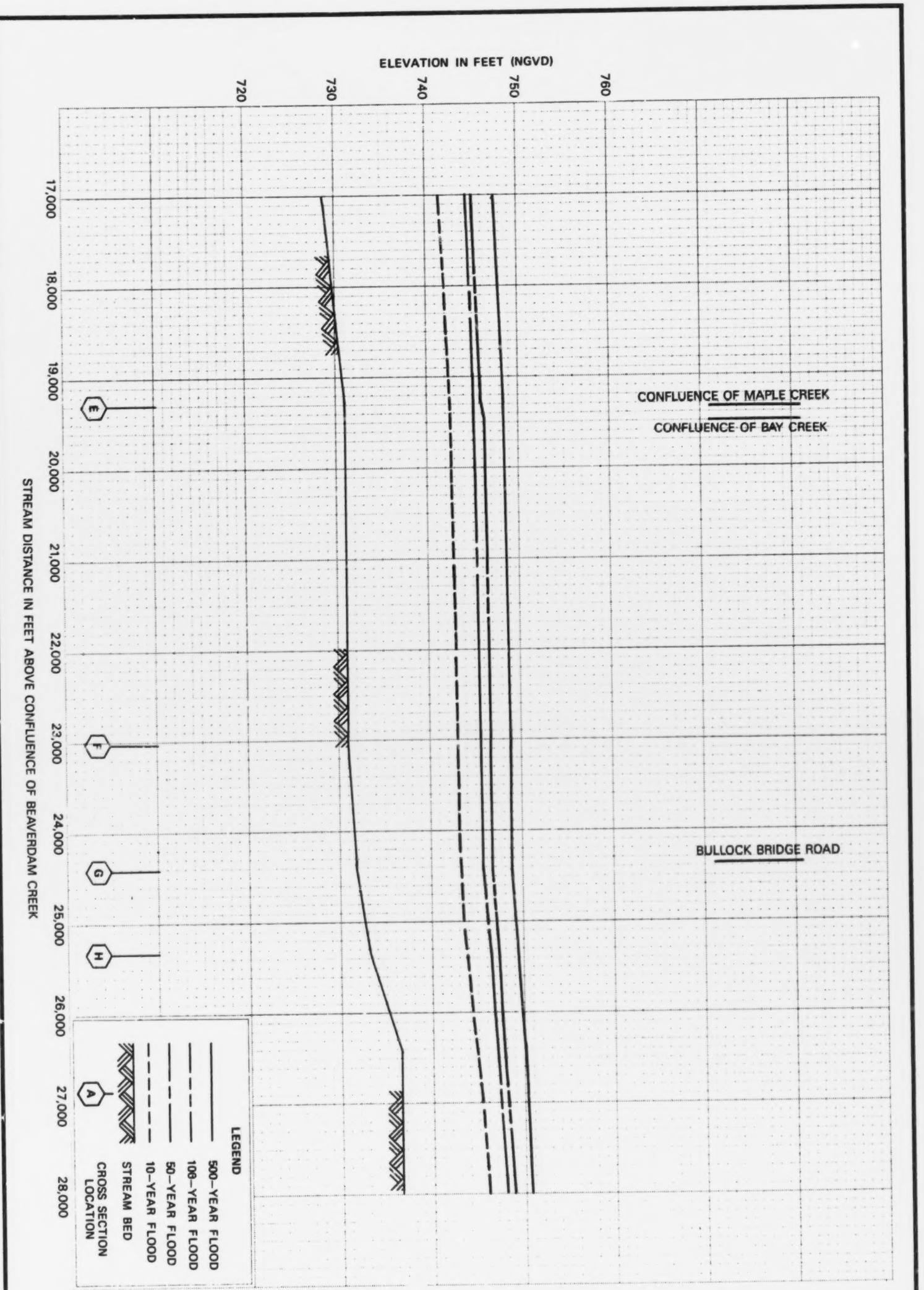
REFERENCE MARK	FLOOD INSURANCE RATE MAP PANEL	ELEVATION (FEET NGVD)	DESCRIPTION OF LOCATION
1	0015	771.63	chiseled cross in northeast corner of bridge abutment at State Route 81 over the Alcovy River
2	0085	740.28	bolt on north side of Bullock Bridge Road bridge over the Alcovy River
3	0085	735.88	northeast corner of abutment of New Hope Church Road bridge over the Alcovy River
4	0080	865.19	railroad spike in 15-inch oak located 30 feet south of Hodgers Road along Big Flat Creek, about 100 feet west of bank
5	0080	876.04	nail in power pole located 100 feet east of culvert for Big Flat Creek under U.S. Route 78
6	0080	882.60	railroad spike in power pole located about 40 feet east of Big Flat Creek bank, 100 feet north of Old Zion Cemetery Road
7	0070	741.45	chiseled cross in southeast corner of culvert for Little Haynes Creek under Center Hill Church Road
8	0070	924.02	railroad spike in power pole located on west side of intersection of Claude Brewer Road and Rabbit Farm Road
9	0070	791.65	railroad spike in 26-inch sycamore located about 200 feet southeast of Green Street, 55 feet northeast of centerline of Little Haynes Creek
10	0105	777.07	chiseled cross in northwest corner of culvert for Jacks Creek under Old Athens Highway
11	0105	798.50	chiseled cross in northeast corner of headwall at East Marable Street bridge over Jack Creek Tributary No. 1

ELEVATION REFERENCE MARKS

REFERENCE MARK	FLOOD INSURANCE RATE MAP PANEL	ELEVATION (FEET NGVD)	DESCRIPTION OF LOCATION
12	0105	802.45	nail and cap in centerline of John Stowe Road bridge over Shoal Creek
13	0111	758.48	corner of culvert for Mountain Creek on upstream side of Spring Street
14	0111	779.14	chiseled cross in southeast corner of downstream headwall of State Route 138 bridge over Mountain Creek
15	0111	792.71	northeast corner of upstream headwall of U.S. Route 78 bridge over Mountain Creek
16	0111	761.66	railroad spike in power pole located on west side of Breedlove Drive, 100 feet south of Mountain Creek Tributary No. 1
17	0111	754.87	railroad spike in power pole 250 feet east of Mountain Creek, 50 feet north of McDaniel Road
18	0110	728.18	southeast corner of upstream Carl Moon Road bridge over Shoal Creek
19	0110	731.66	northwest corner of culvert for Shoal Creek under Michael Road .
20	0110	747.30	northeast corner of culvert for Shoal Creek under Mount Vernon Road
21	0110	784.74	nail and cap in centerline of Dry Pond Road bridge over Shoal Creek
22	0110	725.83	southeast corner of downstream Carl Moon Road bridge over Shoal Creek
23	0045	762.50	southeast corner of Gratis Road bridge over Shoal Creek



01P	FEDERAL EMERGENCY MANAGEMENT AGENCY **WALTON COUNTY, GA** **AND INCORPORATED AREAS**	**FLOOD PROFILES** **ALCOVY RIVER**



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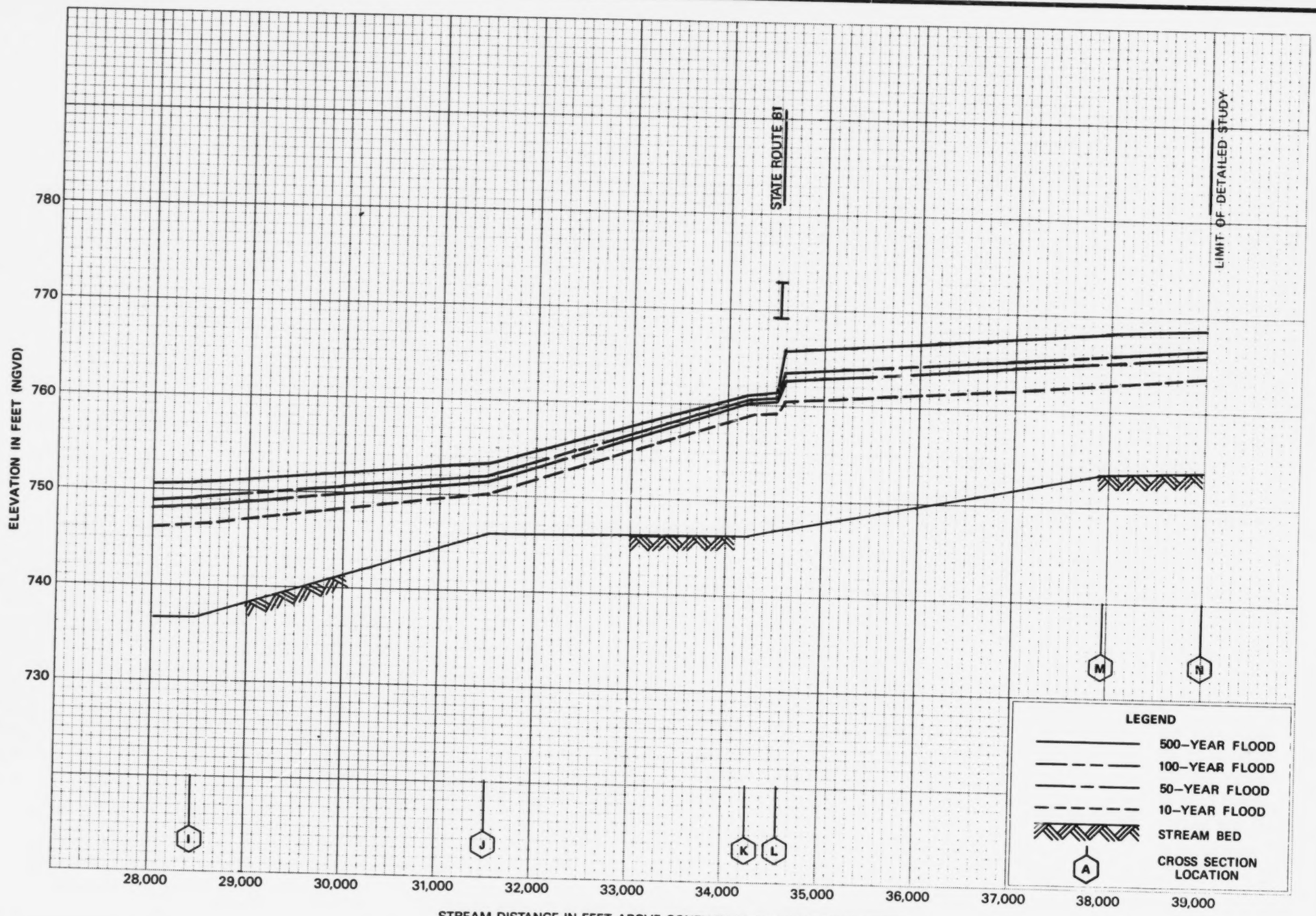


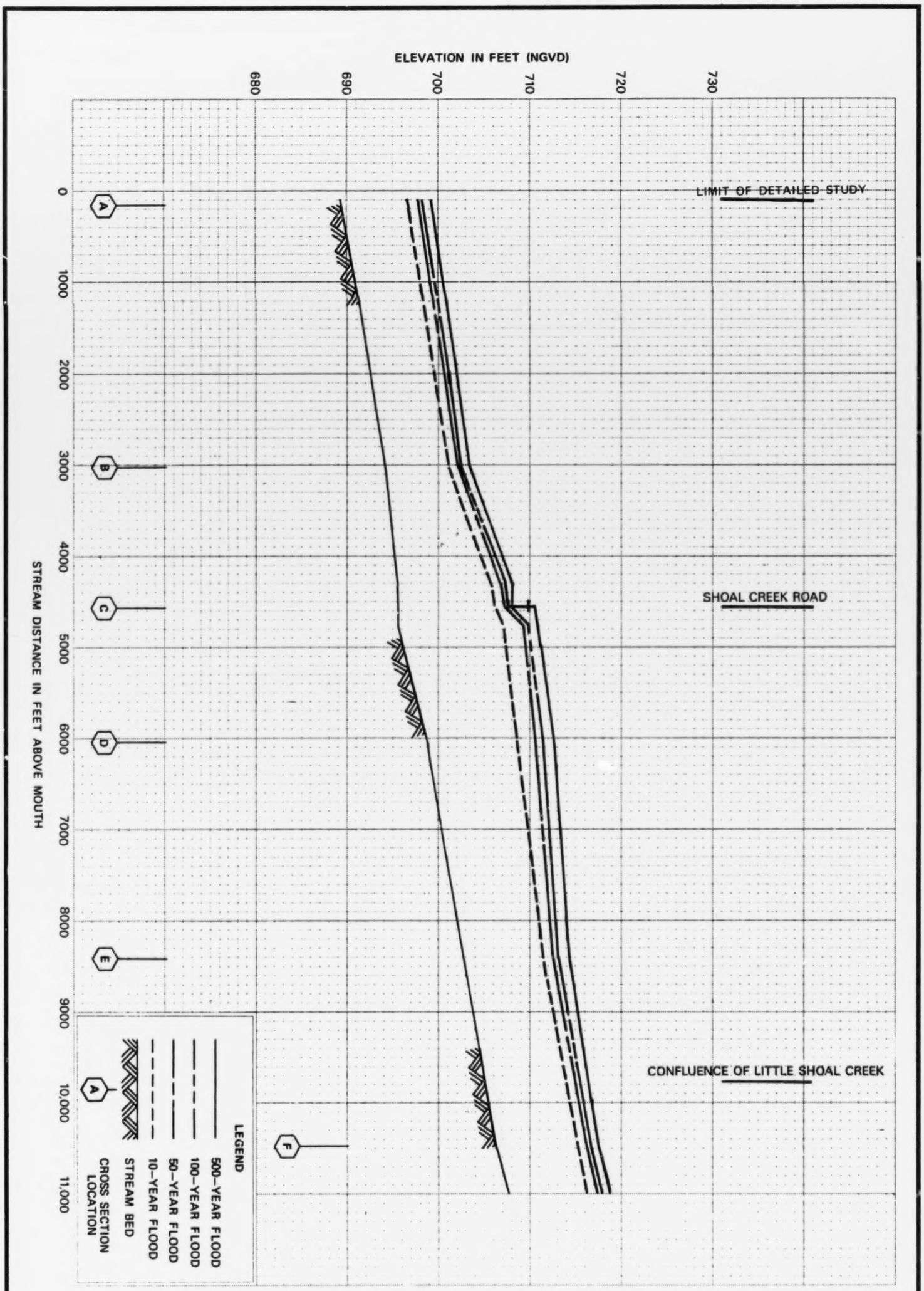
FLOOD PROFILES

ALCOVY RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

WALTON COUNTY, GA AND INCORPORATED AREAS

03P



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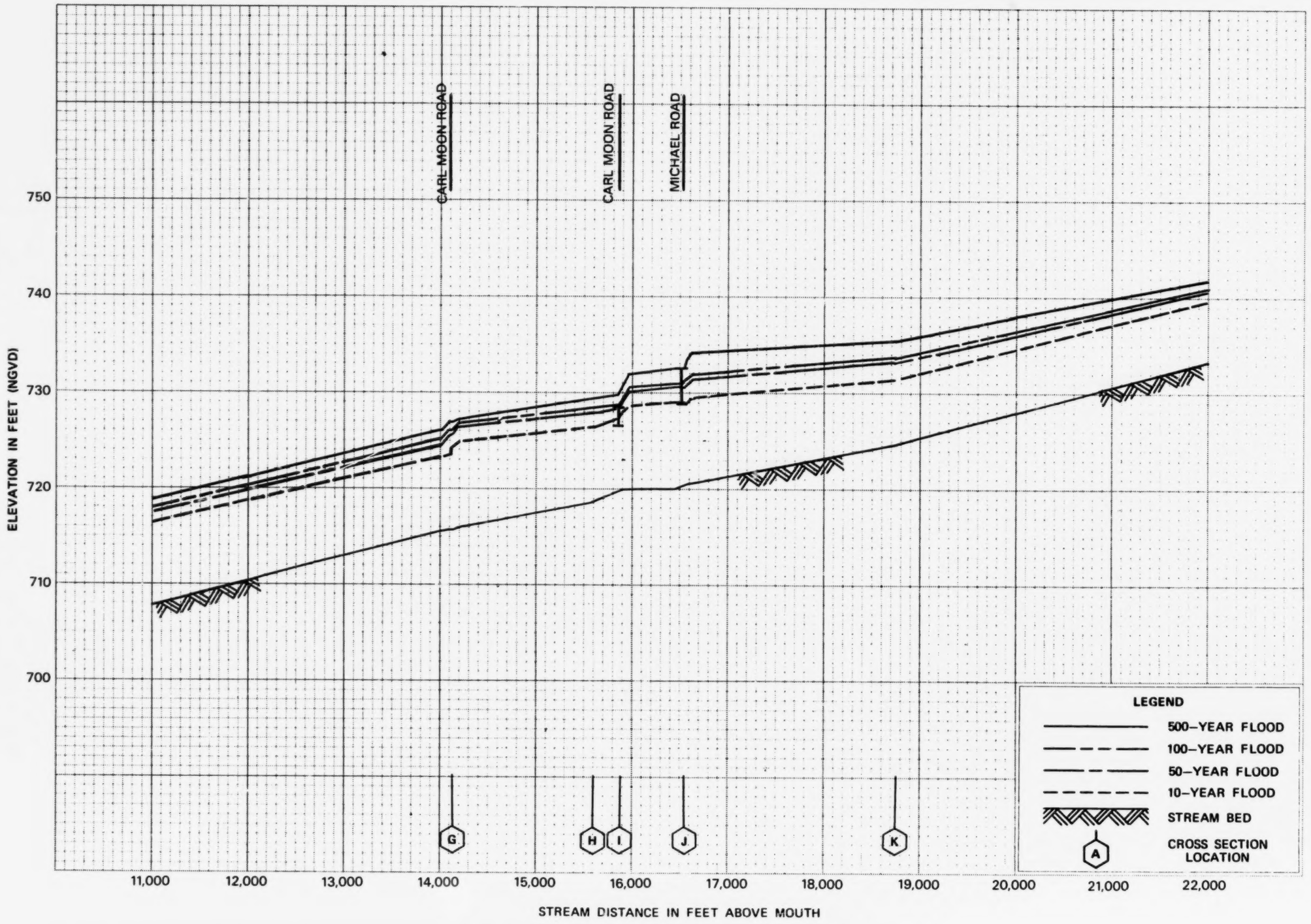


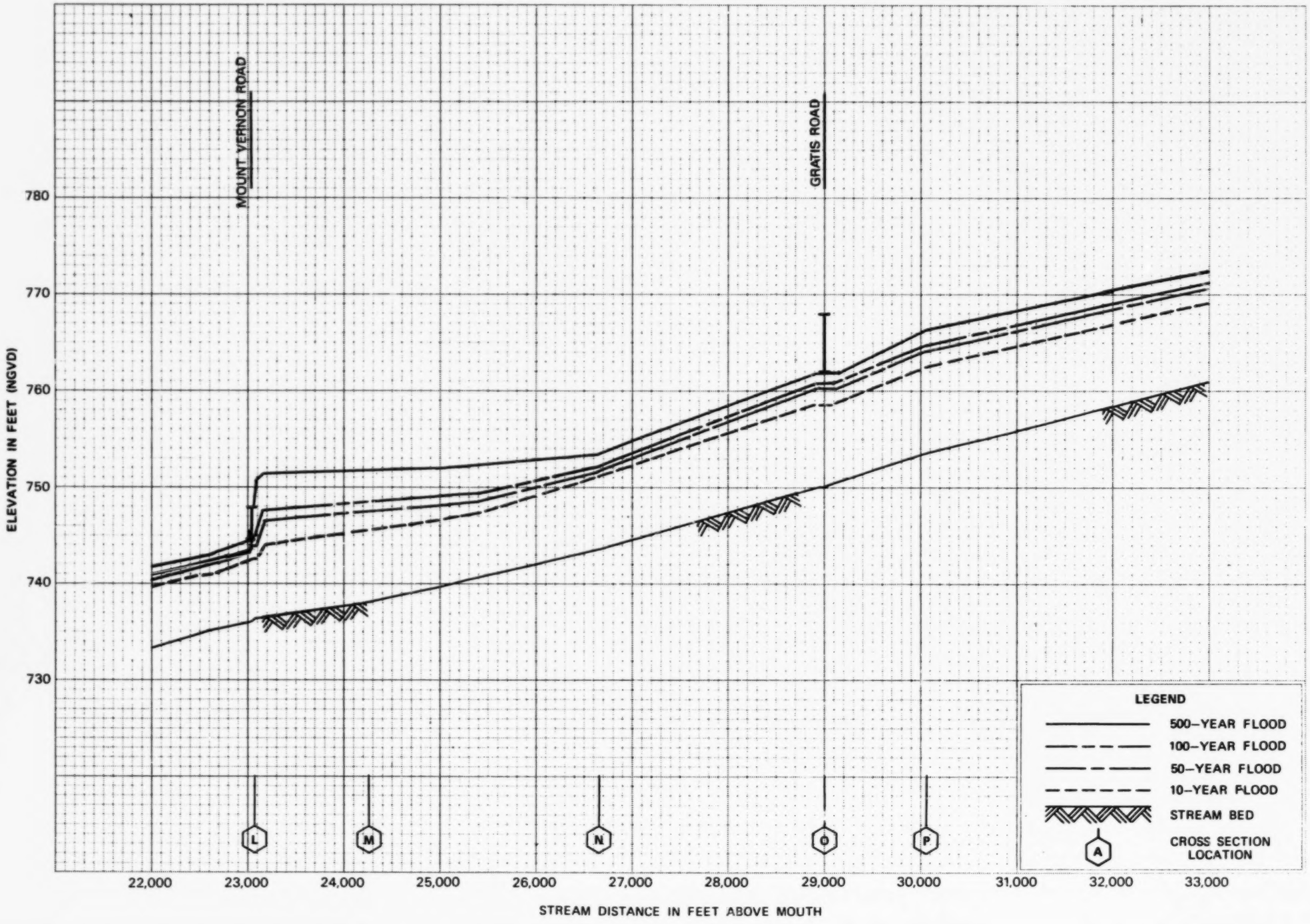
FLOOD PROFILES

SHOAL CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

WALTON COUNTY, GA
AND INCORPORATED AREAS

05P



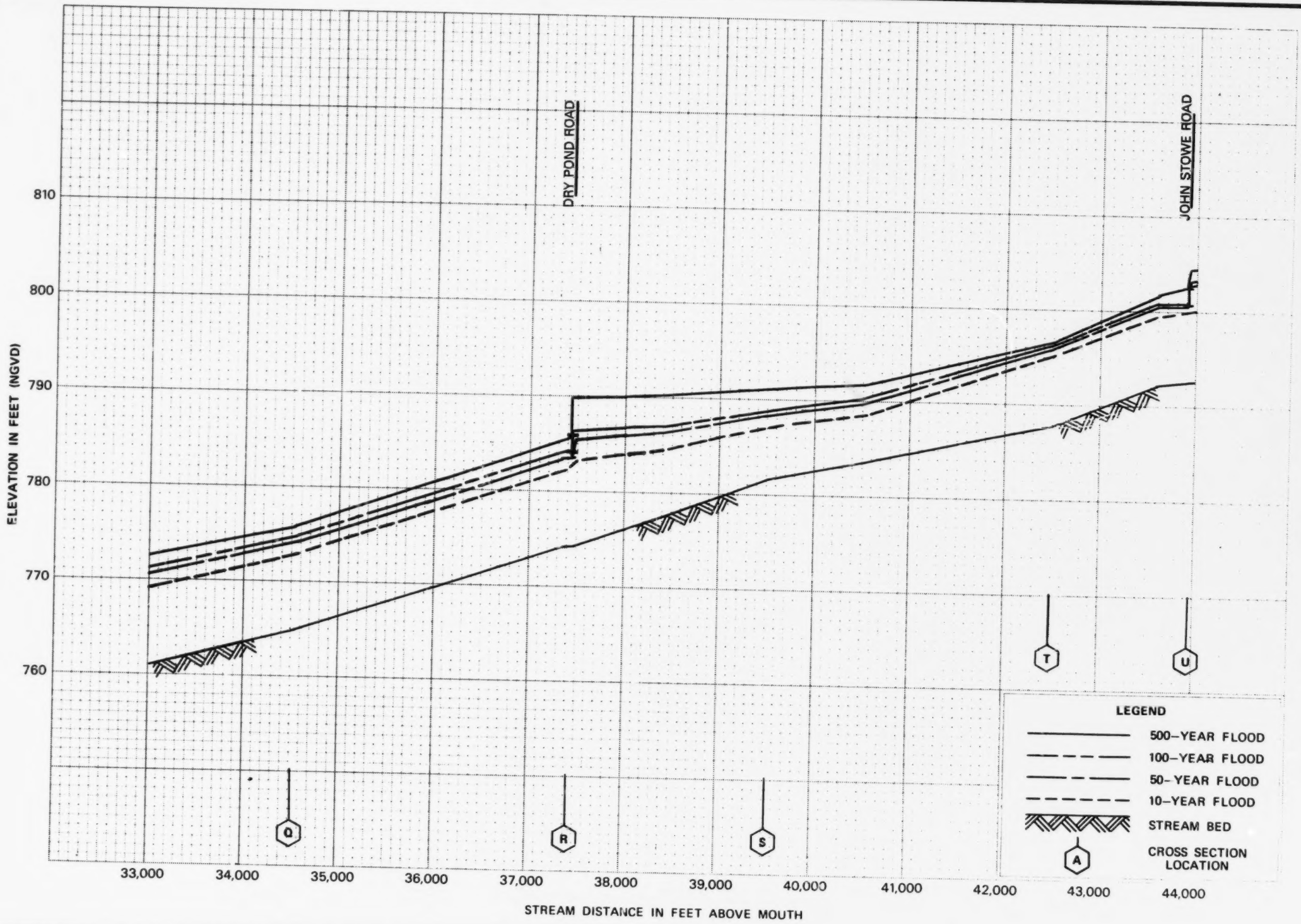
FLOOD PROFILES

SHOAL CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

WALTON COUNTY, GA
AND INCORPORATED AREAS

06P



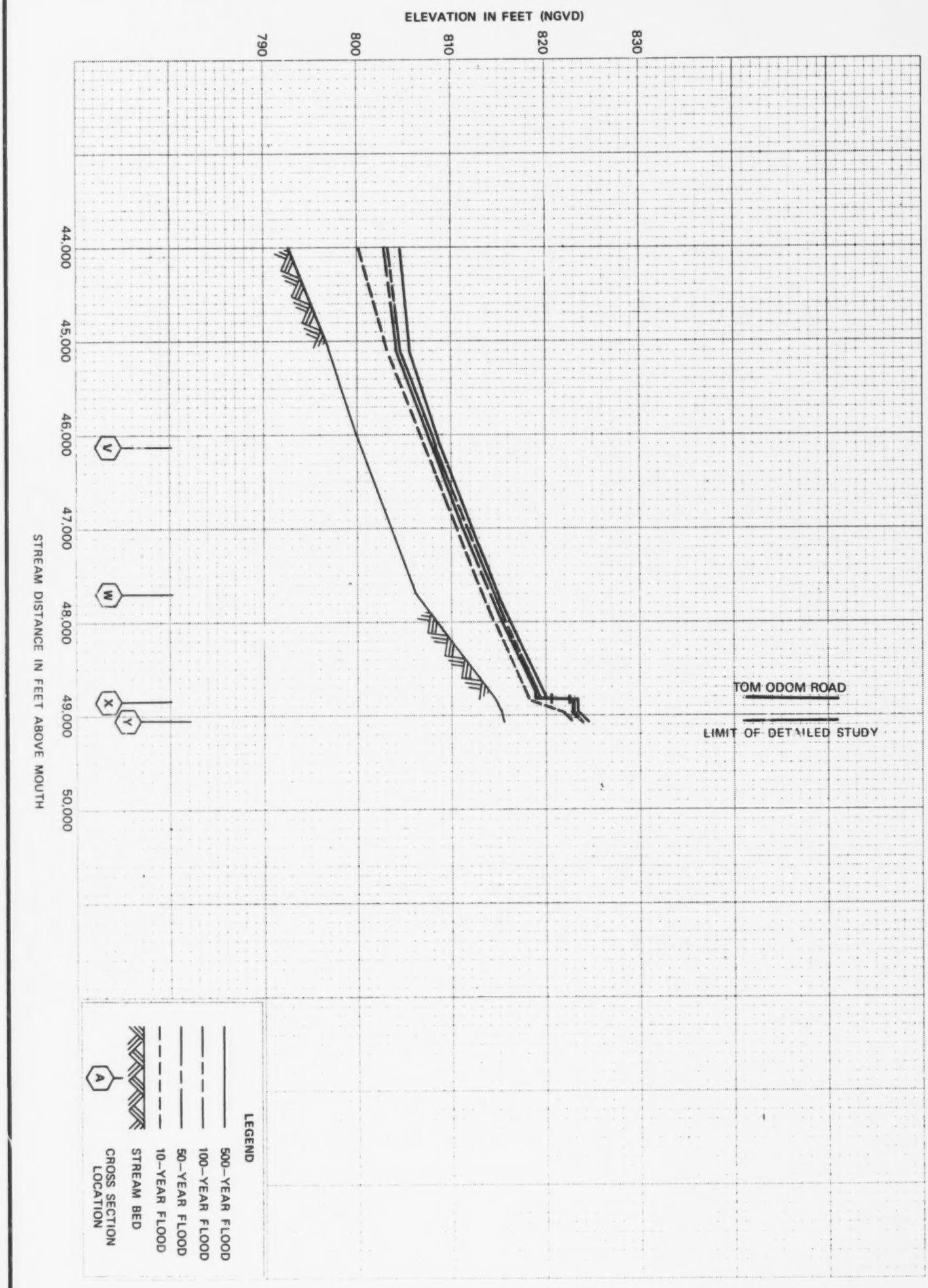
FLOOD PROFILES

SHOAL CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

WALTON COUNTY, GA AND INCORPORATED AREAS

07P



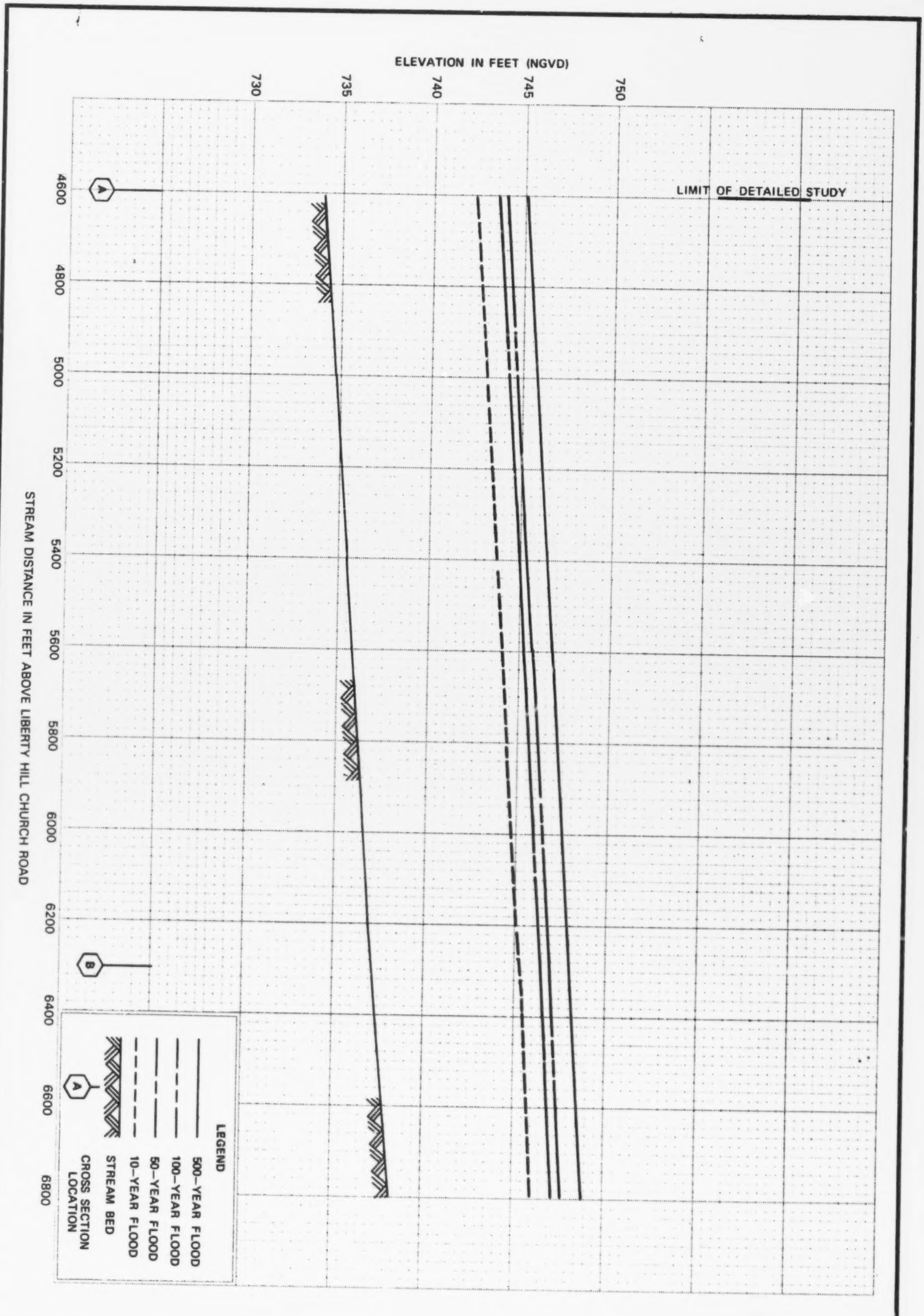
FEDERAL EMERGENCY MANAGEMENT AGENCY

WALTON COUNTY, GA AND INCORPORATED AREAS

FLOOD PROFILES

SHOAL CREEK

08P



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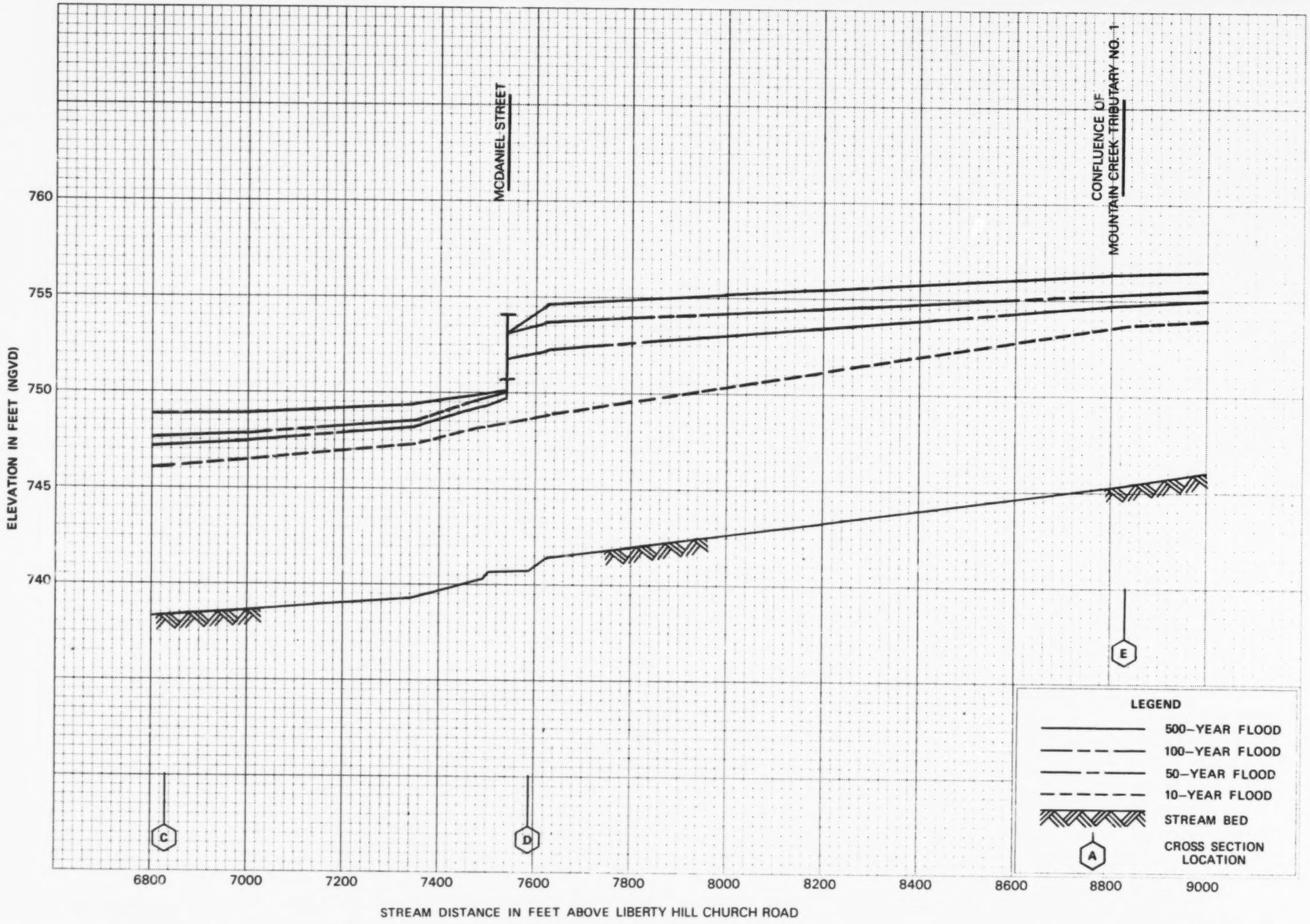


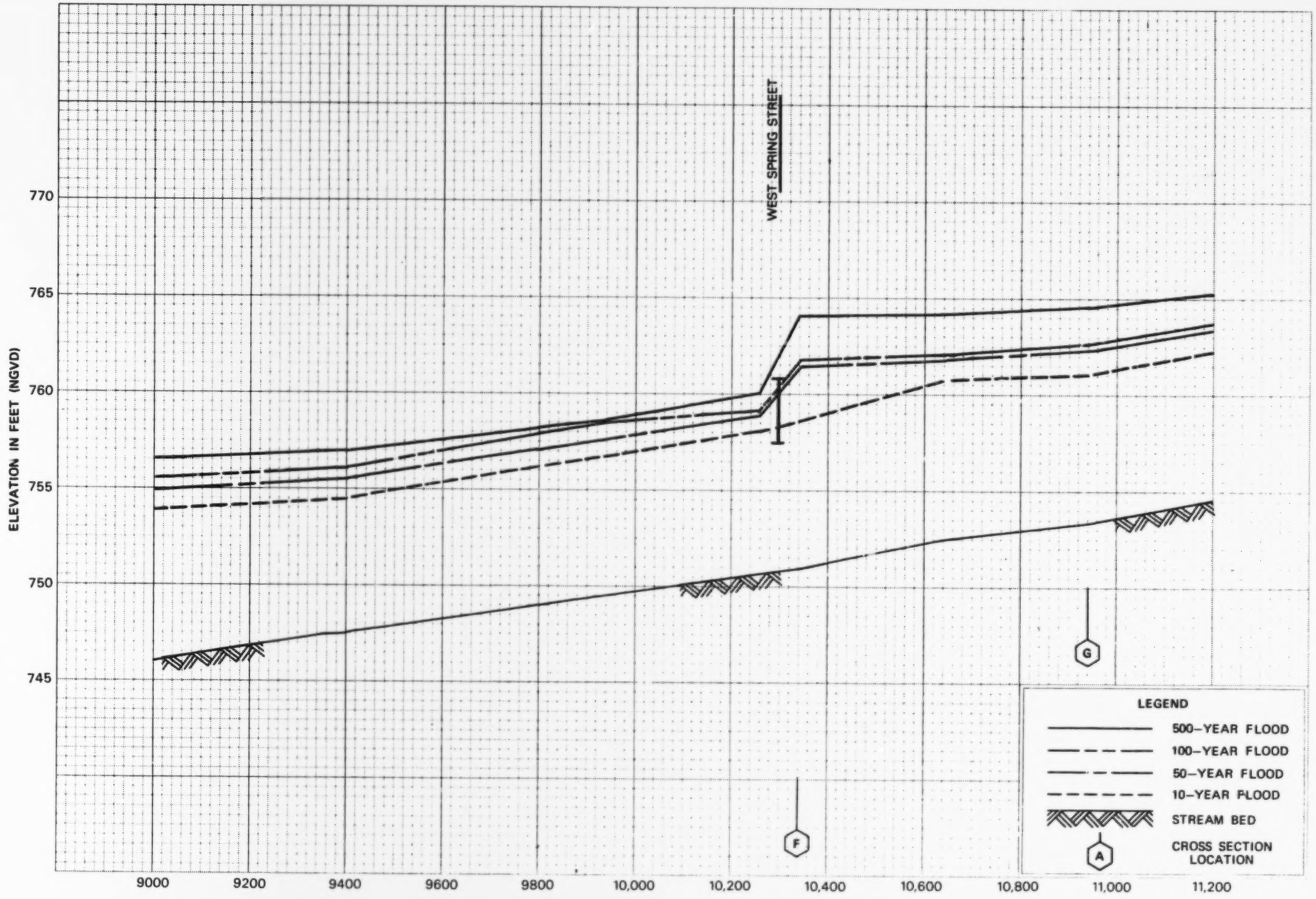
FLOOD PROFILES

MOUNTAIN CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

WALTON COUNTY, GA
AND INCORPORATED AREAS

10P



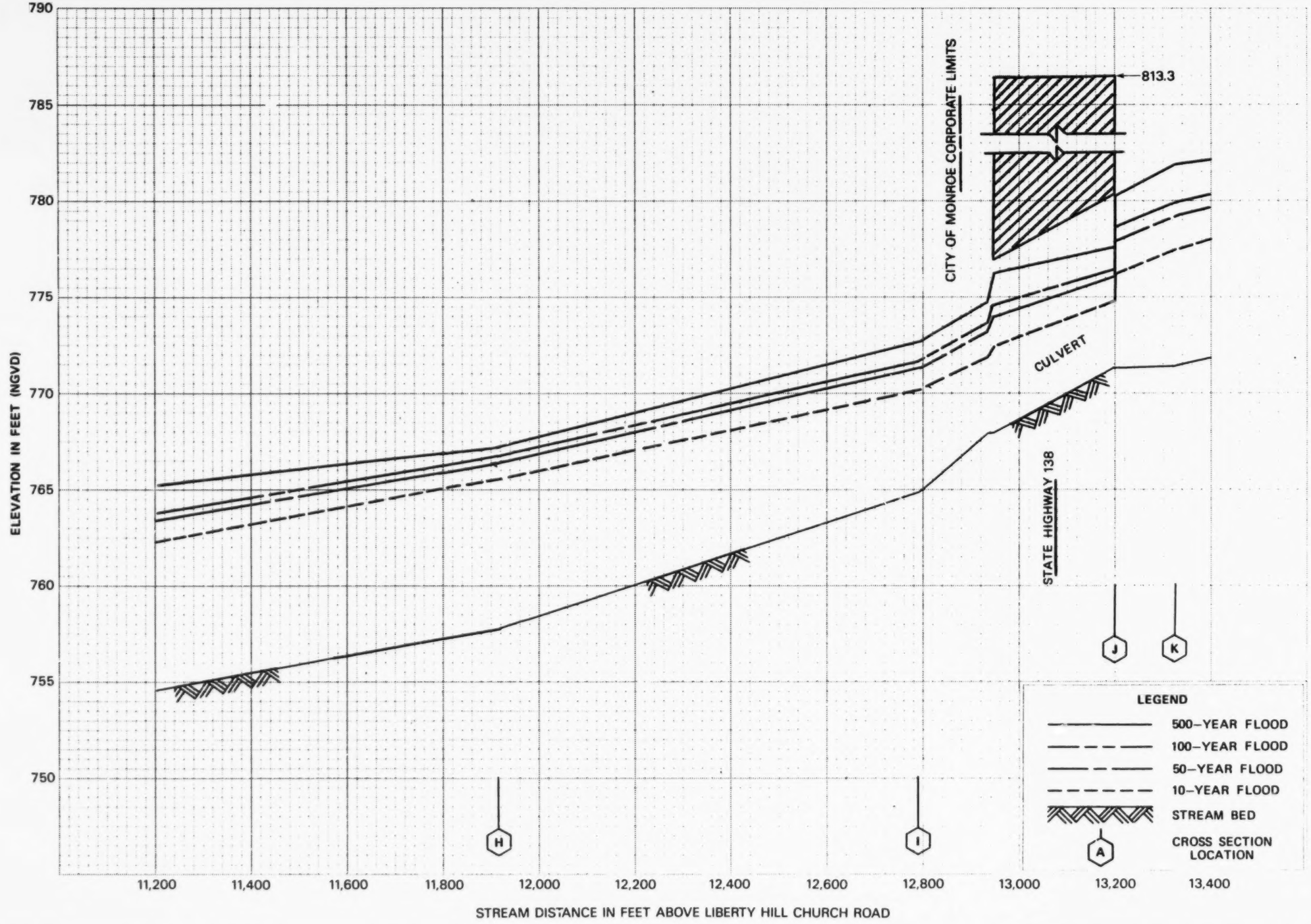
FLOOD PROFILES

MOUNTAIN CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

WALTON COUNTY, GA
AND INCORPORATED AREAS

11P



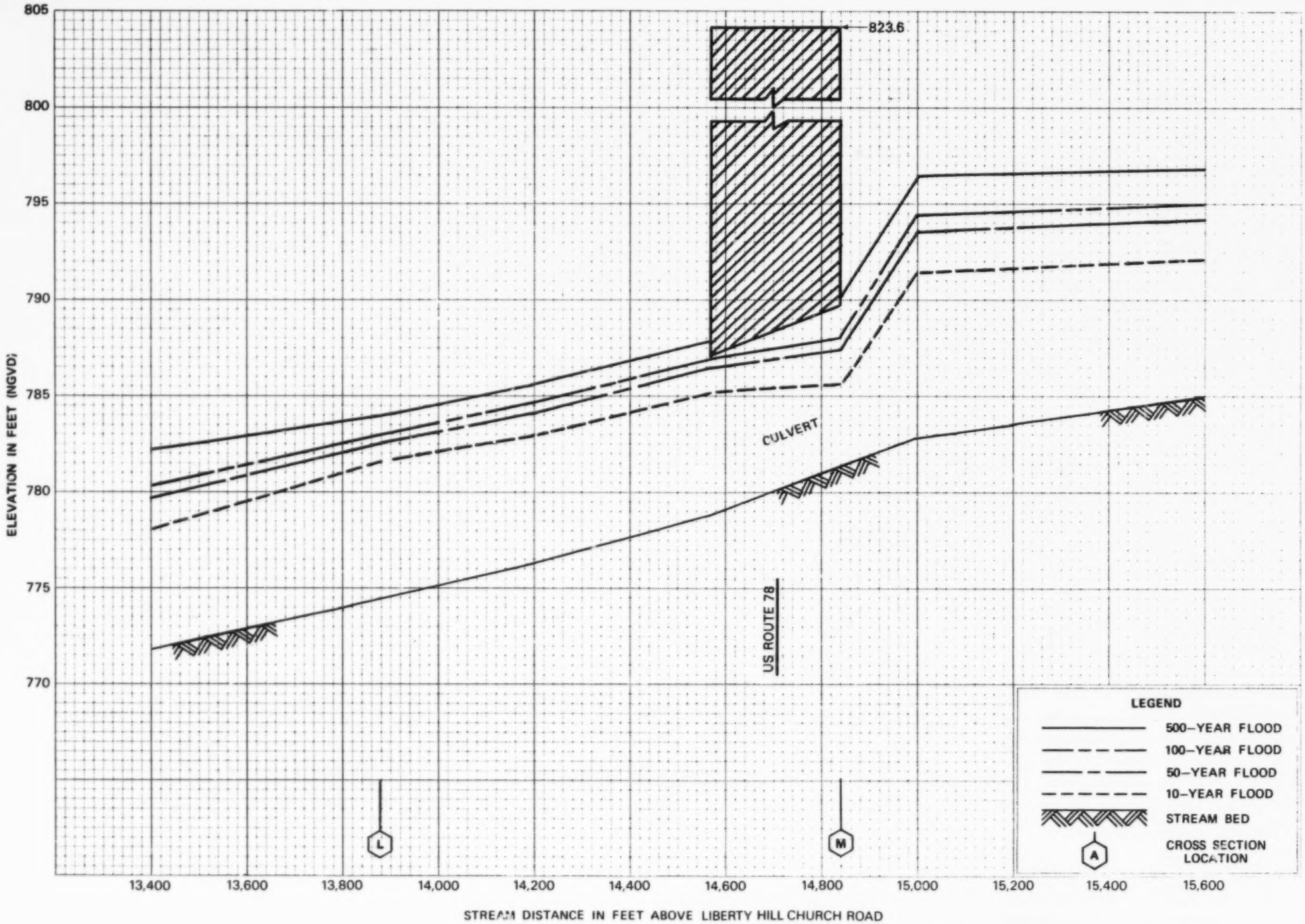
FLOOD PROFILES

MOUNTAIN CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

WALTON COUNTY, GA
AND INCORPORATED AREAS

12P



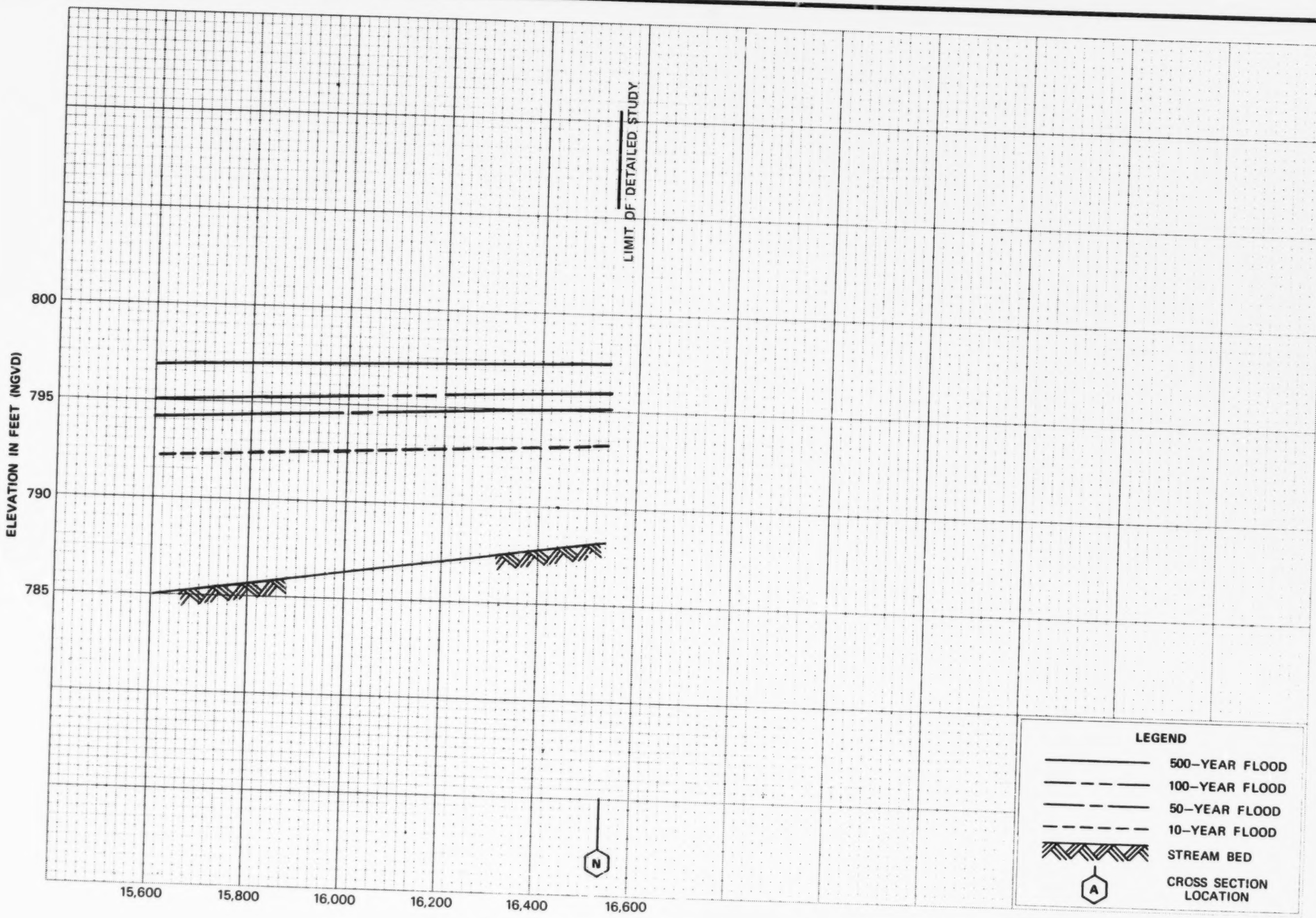
FLOOD PROFILES

MOUNTAIN CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

WALTON COUNTY, GA
AND INCORPORATED AREAS

13P



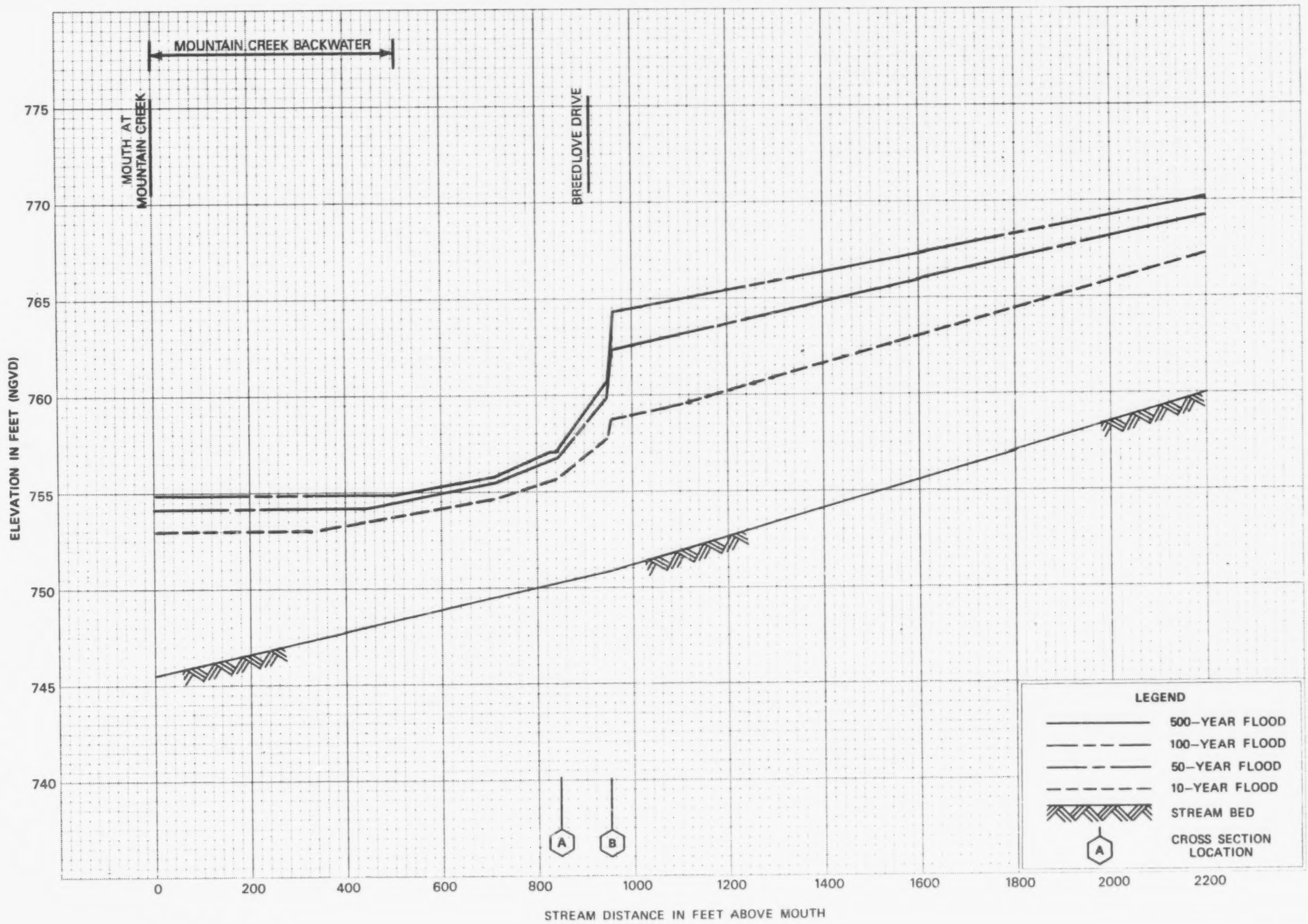
FLOOD PROFILES

MOUNTAIN CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

WALTON COUNTY, GA
AND INCORPORATED AREAS

14P



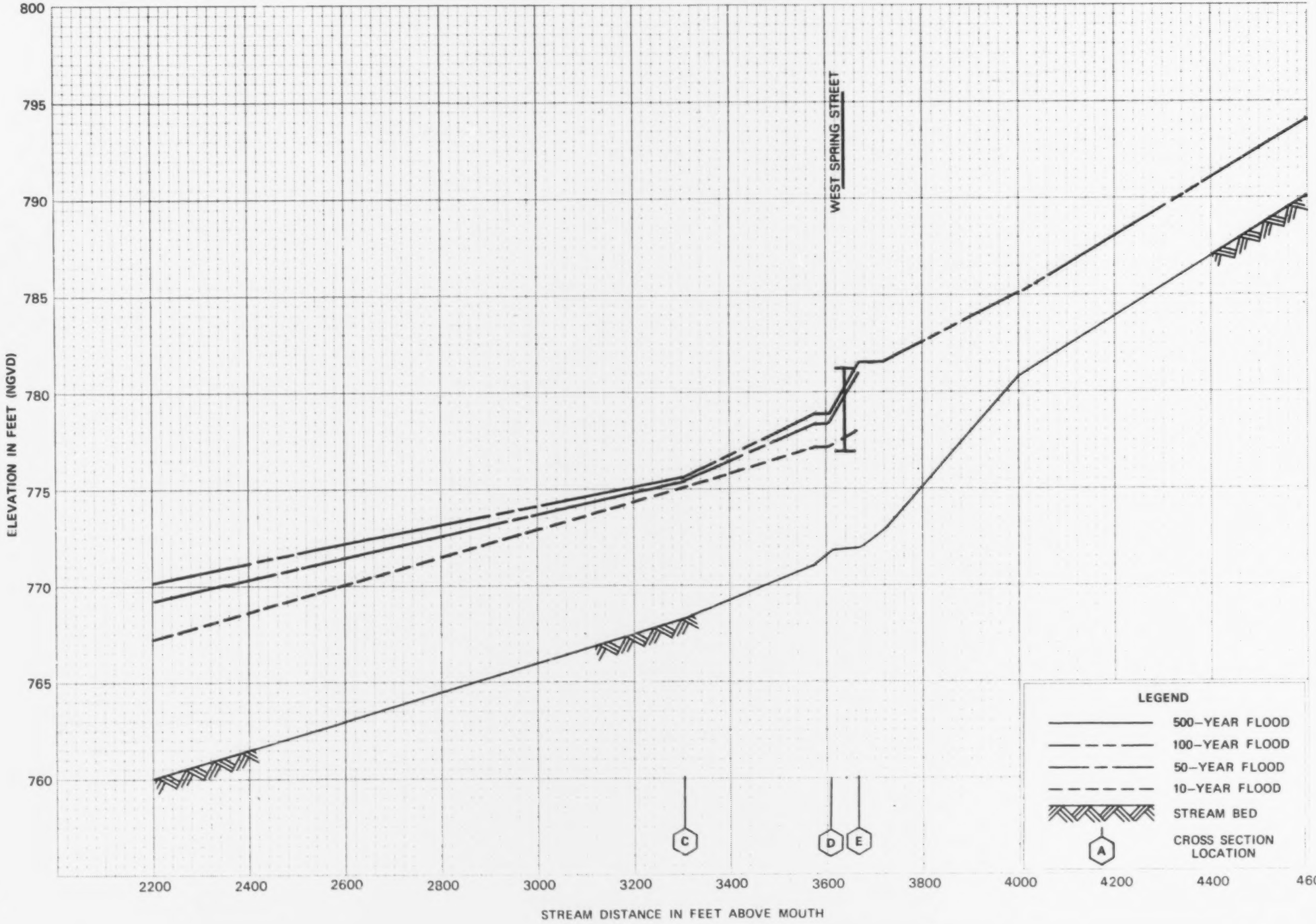
FLOOD PROFILES

MOUNTAIN CREEK TRIBUTARY NO. 1

FEDERAL EMERGENCY MANAGEMENT AGENCY

WALTON COUNTY, GA AND INCORPORATED AREAS

15P



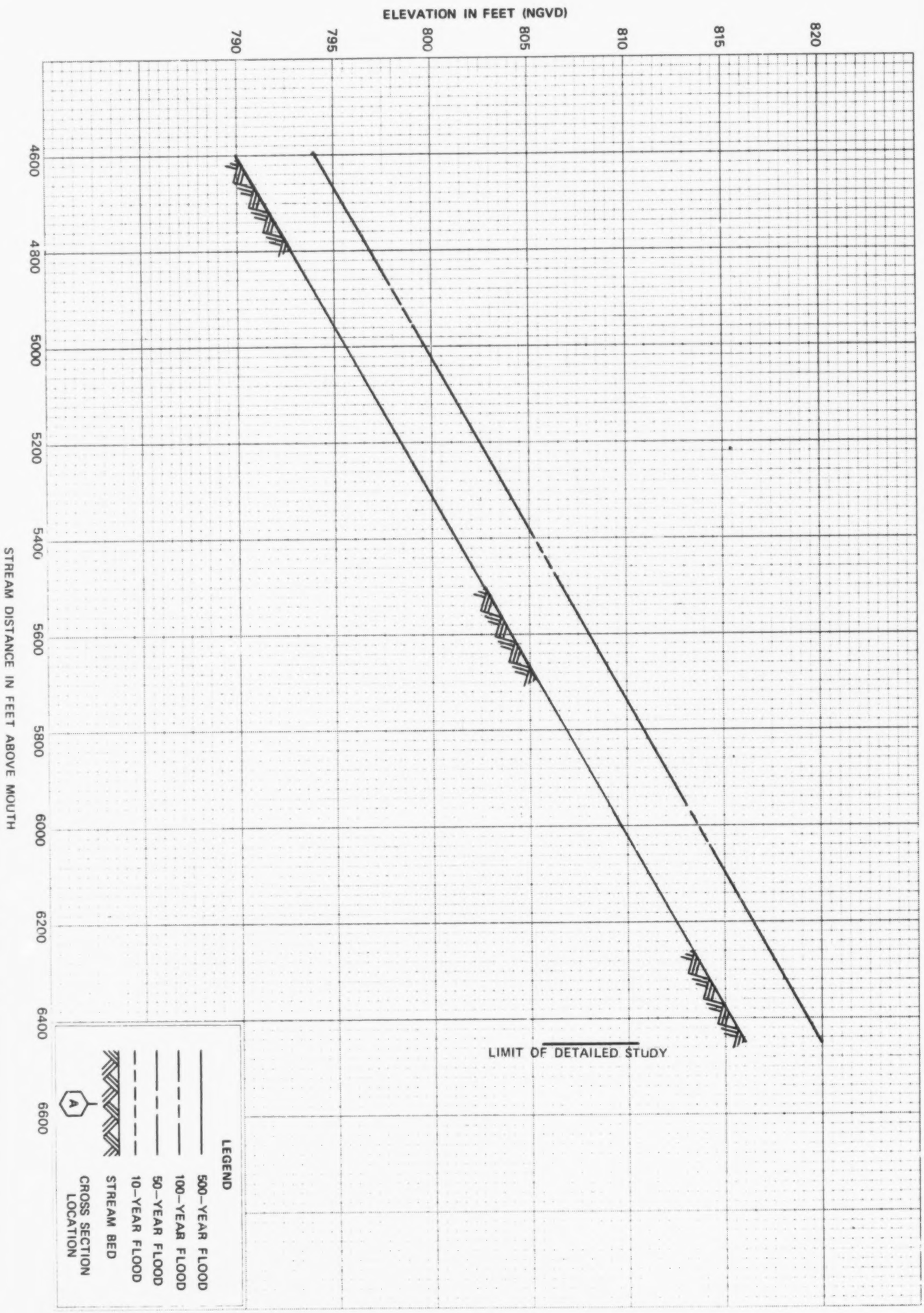
FLOOD PROFILES

MOUNTAIN CREEK TRIBUTARY NO. 1

FEDERAL EMERGENCY MANAGEMENT AGENCY

WALTON COUNTY, GA
AND INCORPORATED AREAS

16P



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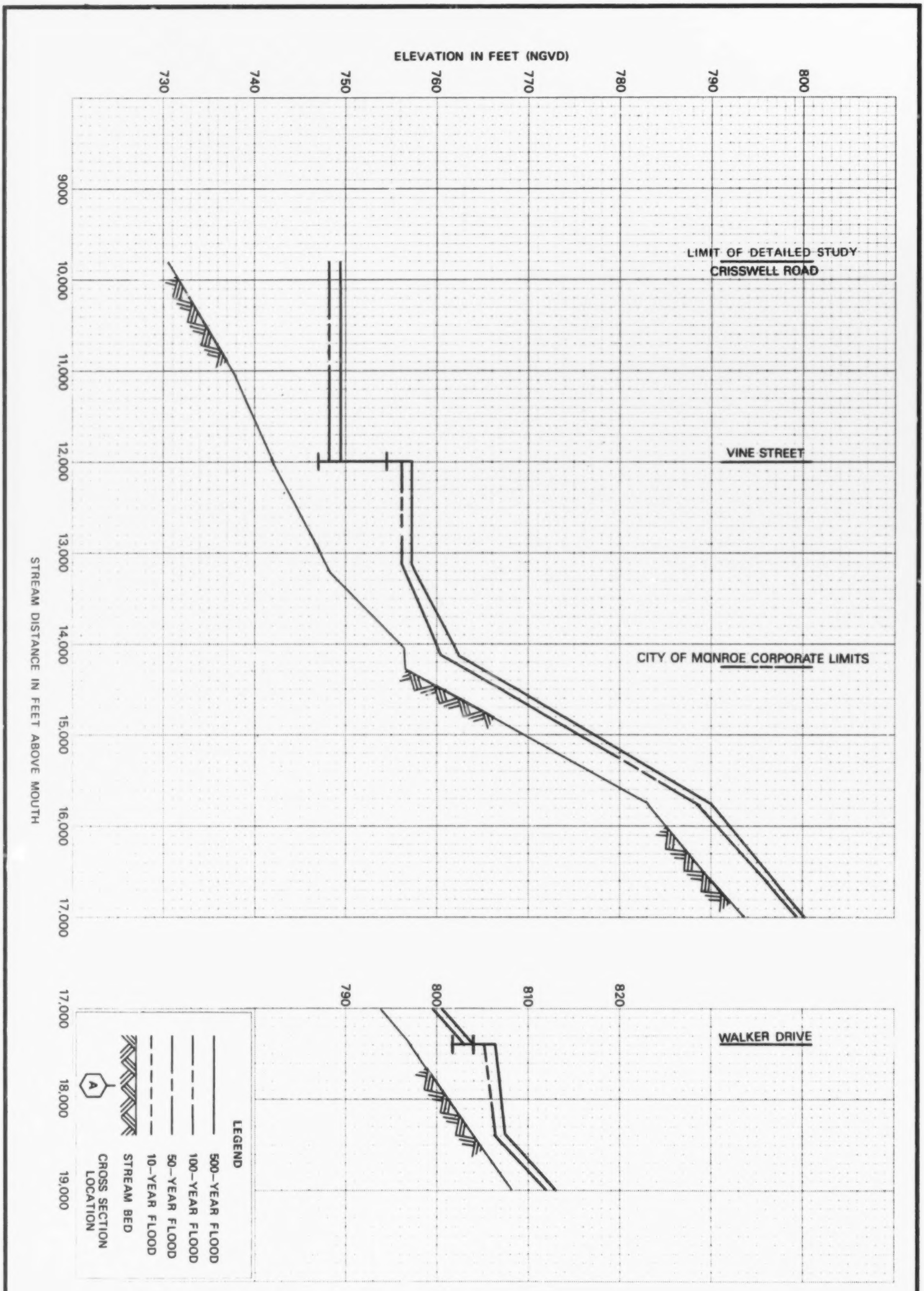

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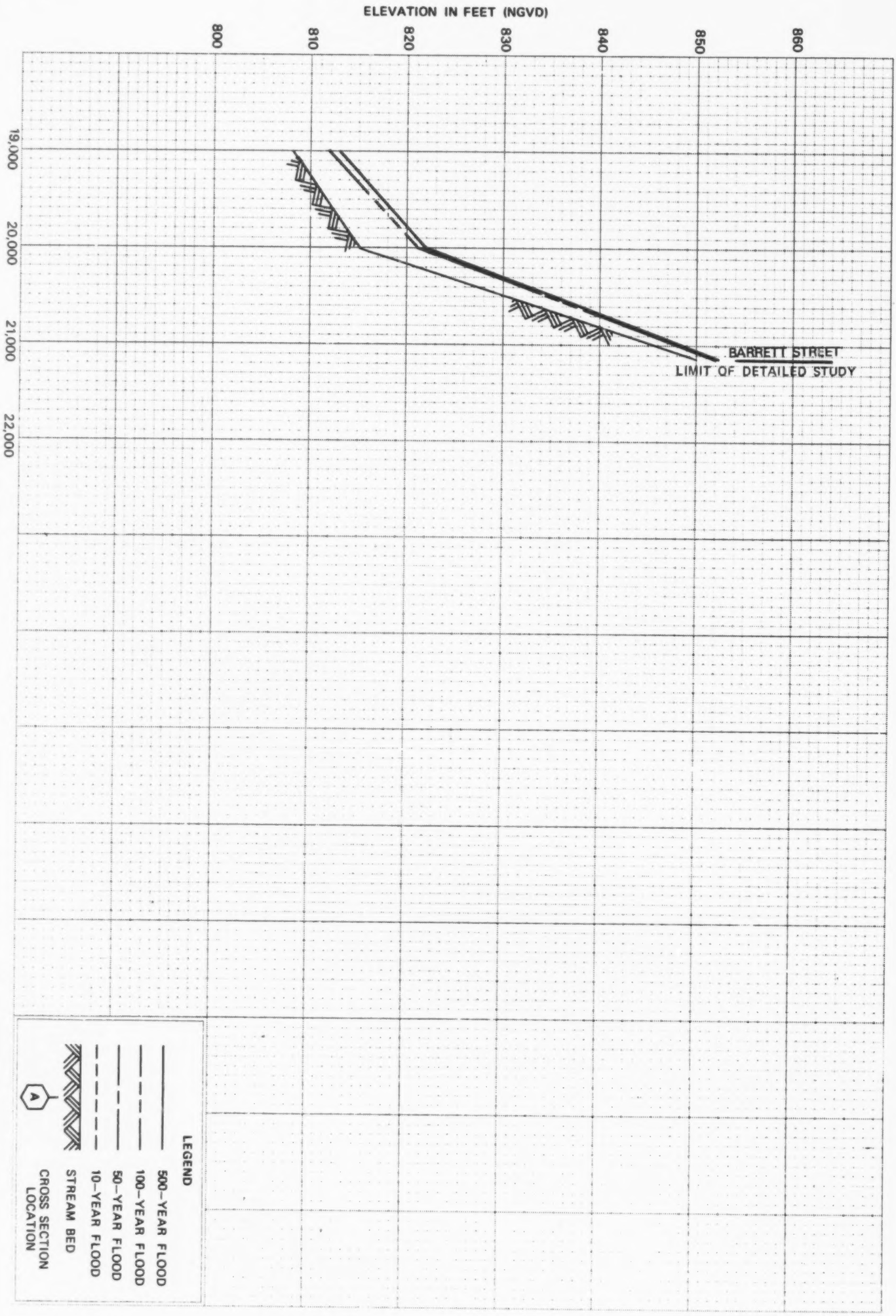

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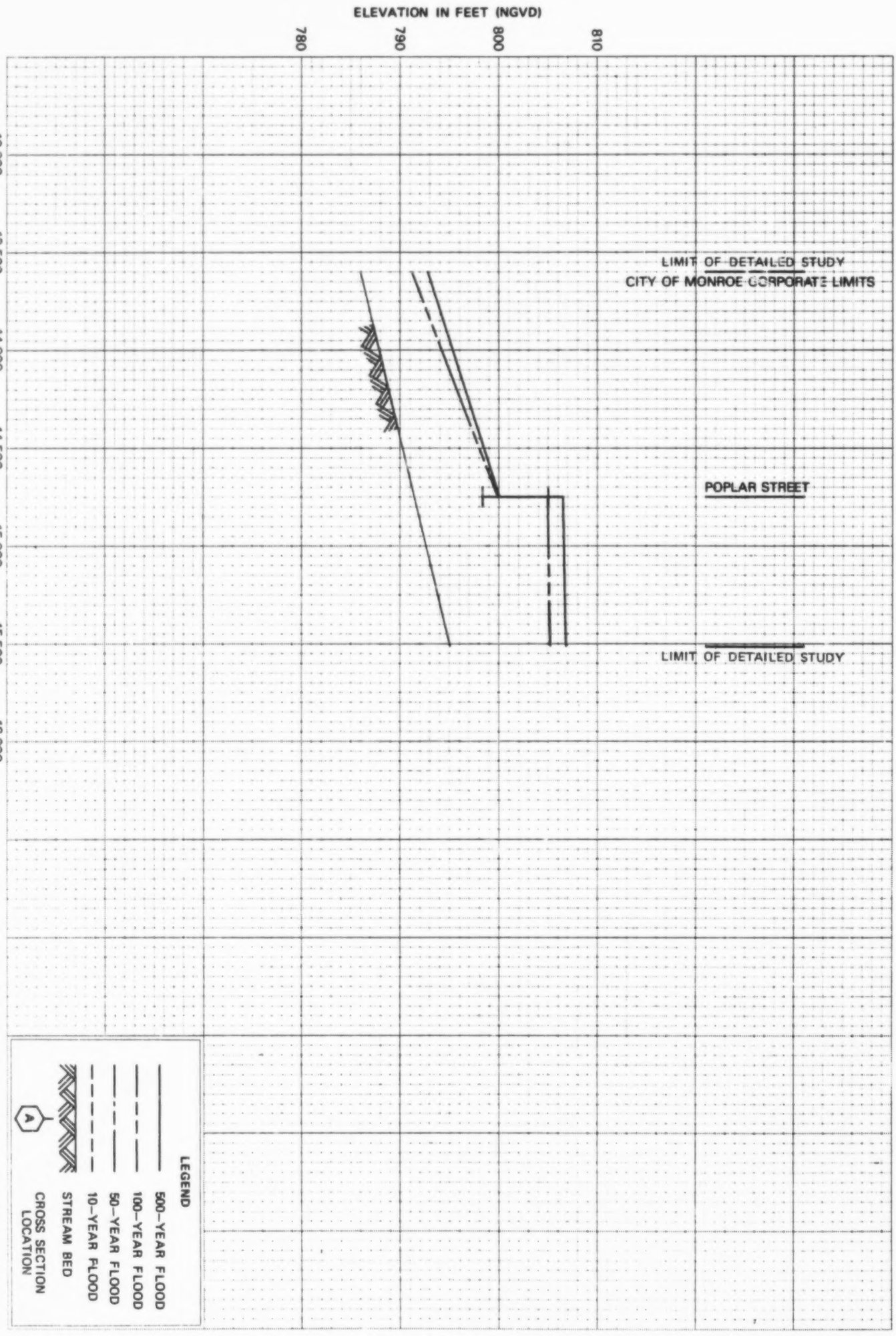

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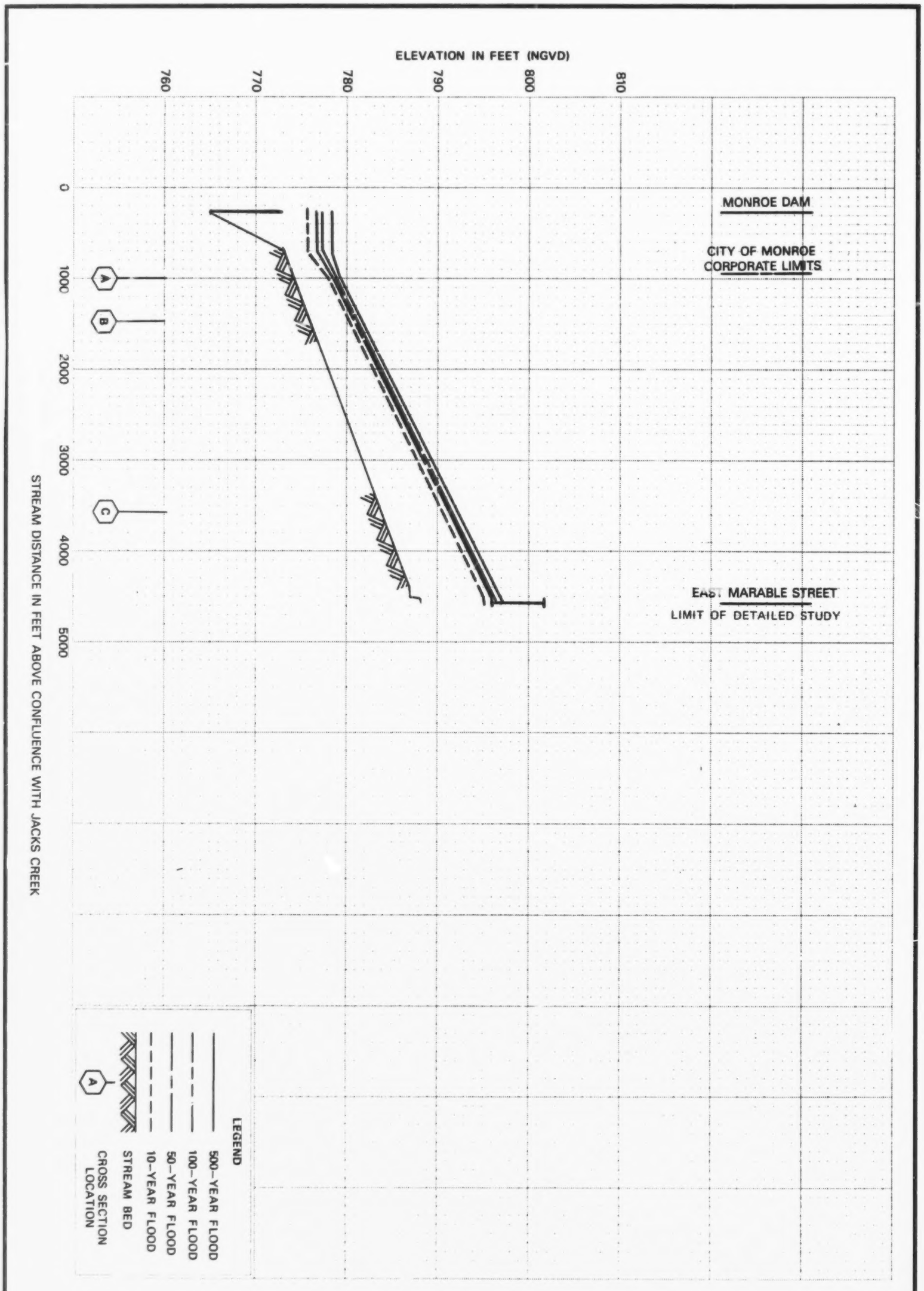


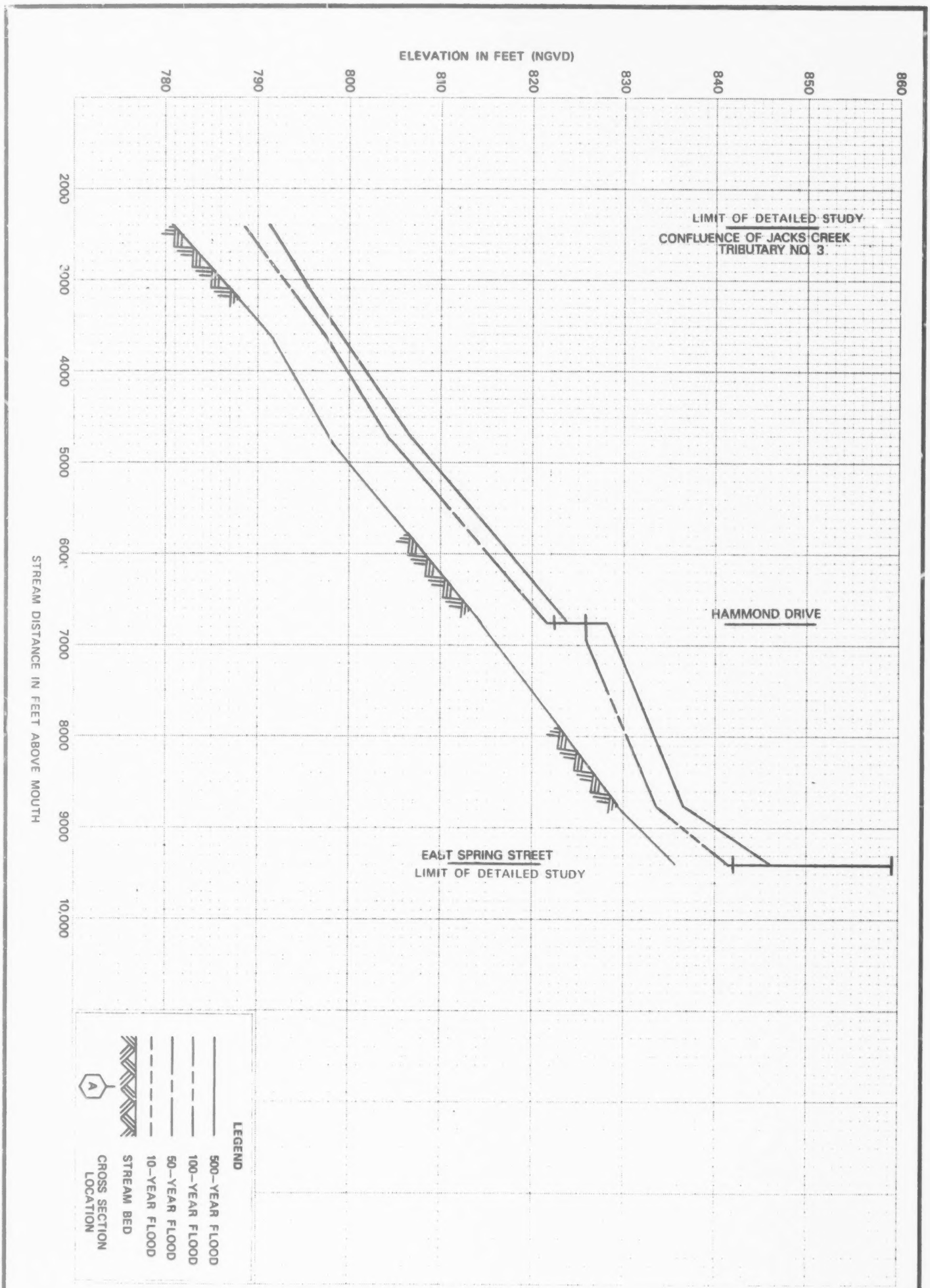
39

FEDERAL EMERGENCY MANAGEMENT AGENCY

WALTON COUNTY, GA
AND INCORPORATED AREAS

FLOOD PROFILES

JACKS CREEK TRIBUTARY NO. 1



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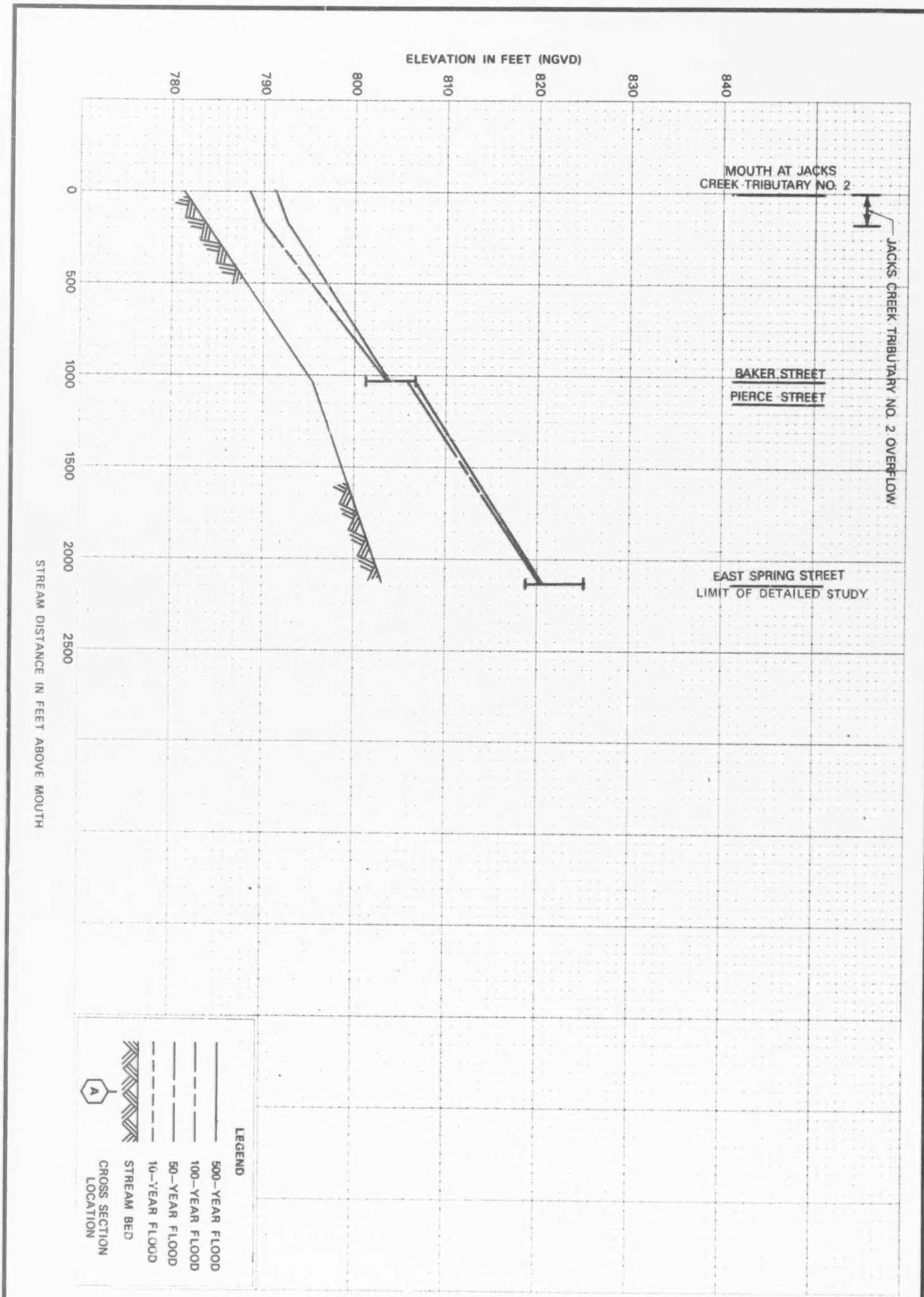

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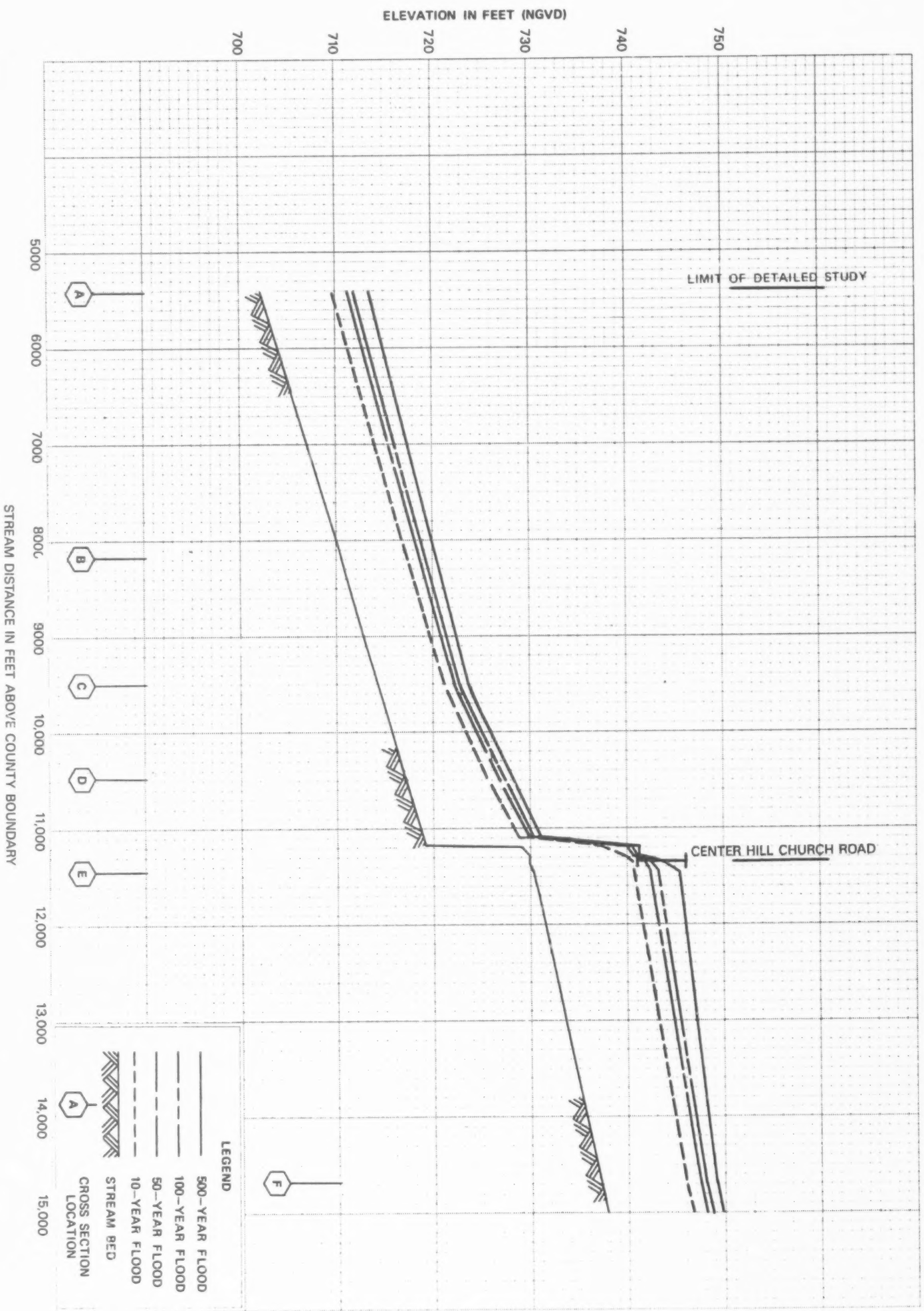
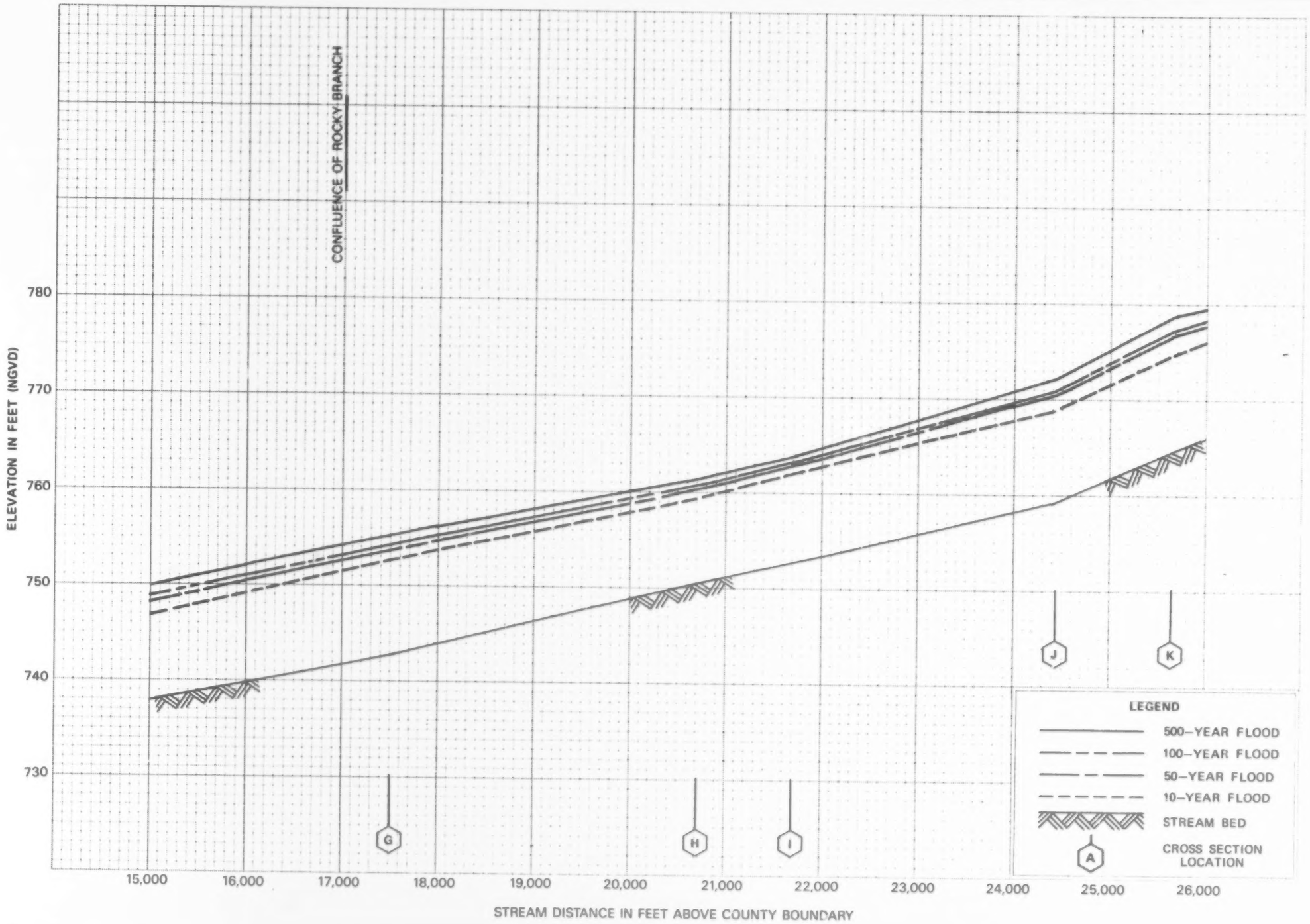


FEDERAL EMERGENCY MANAGEMENT AGENCY

WALTON COUNTY, GA
AND INCORPORATED AREAS

FLOOD PROFILES

LITTLE HAYNES CREEK



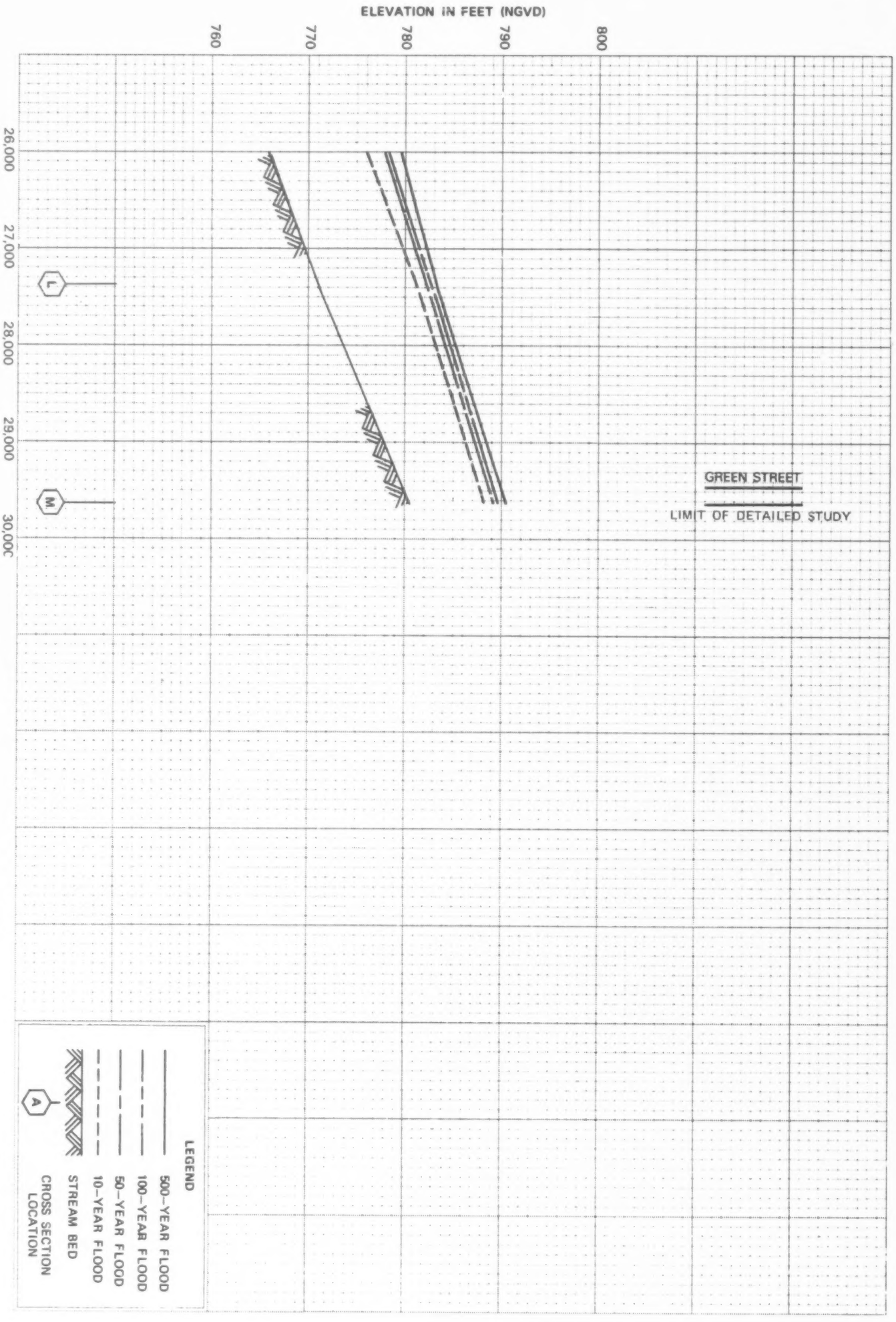
FLOOD PROFILES

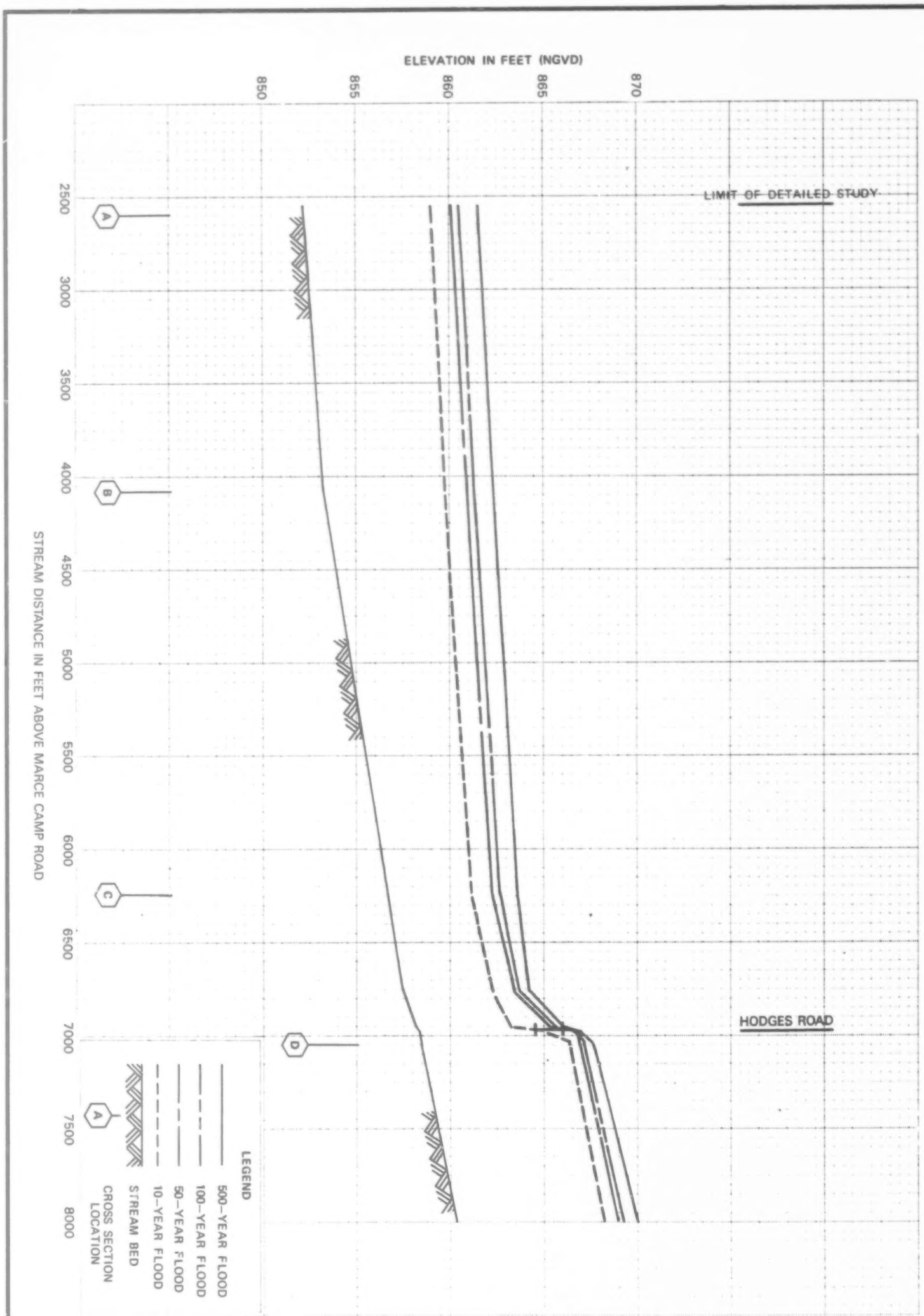
LITTLE HAYNES CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

WALTON COUNTY, GA
AND INCORPORATED AREAS

25P


ELEVATION IN FEET (NGVD)
760
770
780
790
800
26,000
27,000
28,000
29,000
30,000
STREAM DISTANCE IN FEET ABOVE COUNTY BOUNDARY
L
M
GREEN STREET
LIMIT OF DETAILED STUDY
LEGEND
500-YEAR FLOOD
100-YEAR FLOOD
50-YEAR FLOOD
10-YEAR FLOOD
STREAM BED
A
CROSS SECTION LOCATION

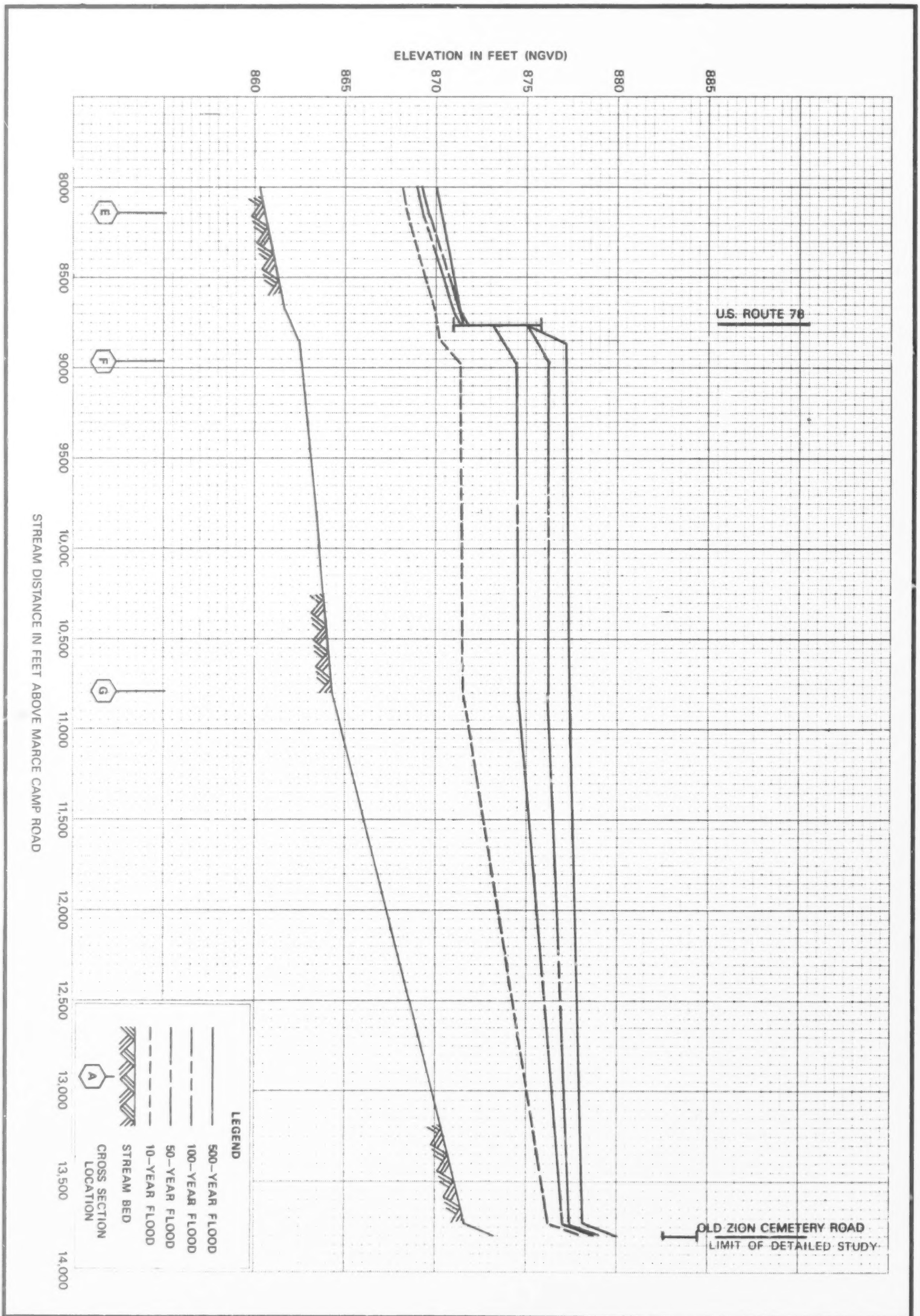


FEDERAL EMERGENCY MANAGEMENT AGENCY

WALTON COUNTY, GA
AND INCORPORATED AREAS

FLOOD PROFILES

BIG FLAT CREEK



FEDERAL EMERGENCY MANAGEMENT AGENCY

WALTON COUNTY, GA
AND INCORPORATED AREAS

FLOOD PROFILES

28P